

# Exhibit 23



**MAS TEM Coefficient of Variation for Tremolite and Anthophyllite in Talc**  
**A Quality Control Study**  
**9-6-18**

**Purpose**

The purpose of this Quality Control study was to determine the MAS TEM analysis coefficient of variation (CV or relative standard deviation RSD) after spiking cosmetic grade talc powder with tremolite and anthophyllite asbestos standard reference material (SRM).

**Materials and Methods**

Talc powder samples spiked with a known amount of tremolite and anthophyllite were produced as follows. A 1.0 gram sample of cosmetic grade talc powder was heated in a muffle furnace at  $400 \pm 5^\circ\text{C}$  for a minimum period of 4 hours in order to remove any bound organic material. Tremolite (NIST SRM 1867 Tremolite) and anthophyllite (NIST SRM 1867 Anthophyllite) asbestos were then added to the talc powder to obtain a concentration of 0.3 % asbestos by weight. The spiked sample was thoroughly mixed in a ball mill for 5 minutes.

Approximately 20 mg of a spiked talc sample was added to 1.2 mL of heavy density liquid (lithium metatungstate, sodium polytungstate, or equivalent heavy liquid), adjusted to a density of 2.85g/ml) in a 1.5 mL conical micro centrifuge tube. Using a disposable stir rod, the spiked talc sample was dispersed in the heavy liquid by macerating the solids between the inside of the centrifuge tube and the rod. The sample was then shaken by hand to ensure even distribution in the liquid. Bubbles in the liquid were removed after 15 minutes in a low vacuum chamber at 8 Torr. Sample tubes were centrifuged at approximately 9000 rpm for 90 minutes according to ISO-22262-2 (1). Tubes were frozen in liquid nitrogen, then the tip containing the frozen pelleted solids was removed with a pre cleaned steel cleaver and transferred to 45 mL deionized distilled H<sub>2</sub>O in a 60 mL centrifuge tube. The tube was capped, shaken by hand five times and then the contents were filtered through a 0.2 – 0.8 um polycarbonate filter followed by an additional 50-100 mL of DI H<sub>2</sub>O. The PC filter was dried and prepared for TEM analysis.

Sample filters were analyzed by TEM at 100 KeV and 20,000 magnification for asbestos and talc. A total of 25 of the same grid squares were analyzed for tremolite and anthophyllite asbestos by each of four TEM analysts. Tremolite and anthophyllite asbestos structures measuring 0.5 um or greater with 5:1 aspect ratios and substantially parallel sides were counted according to the asbestos definition structure sizing rule as stated in the standard TEM protocols (AHERA (TEM section only) ASTM D5755, D5756, D7712-11, ISO 10312, ISO 13794, (2-7)) after verifying the chemistry by EDS and the selected area diffraction pattern (SAED) of each structure. The average (Ave) number of asbestos structures in 25 grid squares were determined for all four analysts along with the standard deviation (SD). The coefficient of variation (CV or RSD) as a percentage was then determined according to the following equation (8, 9).

$$CV = 100 \times \frac{SD}{Ave}$$

## Results

Results from the TEM analysis of the spiked talc powder samples are shown in Table 1 and Table 2 that follow. Table 1 shows that for the 0.3% tremolite spiked talc sample, the fiber-bundle concentration ranged from  $3.2 \times 10^5$  to  $3.55 \times 10^5$  structures of tremolite per gram of talc. For the 0.3% anthophyllite spiked sample, the fiber-bundle concentration ranged from  $4.9 \times 10^5$  to  $5.39 \times 10^5$  structures of anthophyllite per gram of talc. Table 2 shows the average (Mean) standard deviation and the CV for the analysis of each of the asbestos spike samples. The mean for the tremolite spiked sample  $3.38 \times 10^5$  and the SD was  $2.0 \times 10^4$  structures per gram of talc. The CV was 5.99%. The mean for the tremolite spiked sample  $5.14 \times 10^5$  and the SD was  $2.8 \times 10^4$  structures per gram of talc. The CV was 5.50%.

TABLE 1 Total Structures and Structures per gram of Tremolite and Anthophyllite in Talc Powder Samples

Sample	Component	Str/g			
		Analyst 1	Analyst 2	Analyst 3	Analyst 4
0.3%	Tremolite	3.20E+05	3.55E+05	3.20E+05	3.55E+05
0.3%	Anthophyllite	4.90E+05	5.39E+05	4.90E+05	5.39E+05

TABLE 2 Average, SD and CV for the TEM Analysis of Tremolite and Anthophyllite in Talc Powder Samples

Sample	Component	Str/g		
		Mean	STD	CV (%)
0.3%	Tremolite	3.38E+05	2.0E+04	5.99
0.3%	Anthophyllite	5.14E+05	2.8E+04	5.50

Data for the calculation of the CV and Tables 1 and 2 are shown in Appendix 1.

## REFERENCES

1. ISO 22262-2, 2014-09-01
2. EPA AHERA-Part 763 Asbestos (TEM Section Only)
3. ASTM D7712-11 - Standard Terminology for Sampling and Analysis of Asbestos
4. ASTM D5755 - Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy for Asbestos Structure Number Surface Loading

5. ASTM D5755 - Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy for Asbestos Structure Number Surface Loading
6. ISO 10312 - Ambient air -- Determination of asbestos fibres -- Direct transfer transmission electron microscopy method
7. ISO 13794 - Ambient air -- Determination of asbestos fibres -- Indirect-transfer transmission electron microscopy method
8. Heisler, S.I. (ed) In Economics/Statistics. Wiley Engineer's Desk Reference. p 456. John Wiley and Sons, New York, NY, (1998).
9. Average, Standard Deviation and Relative Standard Deviation.  
<http://www.chem.tamu.edu/class/fyp/keeney/stddev.pdf>



## **APPENDIX 1**

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 1			Length	Width	G. O. Area
Date of Analysis	7/16/2018		G. O. in microns =	105	105	11025
Initial Weigh(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Bundle	Tremolite	8.9	1.4	6.4	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.6	0.2	33.0	X	X
3	A8-E5	Bundle	Tremolite	10	1	10.0	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.9	1.3	5.3	X	X
5	A8-E8	Bundle	Tremolite	15.3	1.1	13.9	X	X
6	A8-E9	Bundle	Tremolite	43.2	6.9	6.3	X	X
NSD	A8-F10							
7	A8-F2	Bundle	Tremolite	9	1.4	6.4	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	18.9	1.2	15.8	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
NSD	A8-G5							
9	A8-G6	Bundle	Tremolite	4.9	0.92	5.3	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.      Sample Wt. Post  
   HL Separation

0.02055	0	g
Percent of Orig. Post Separation	0	(%)

Wt. Of Sample Analyzed	0.00002817	g
Filter size	201.1	mm <sup>2</sup>
Number of Structures Counted	9	Str.
Structures per Gram of Sample	3.20E+05	Str./g

Detection Limit	3.55E+04	Str./g
Analytical Sensitivity	3.55E+04	Str./g

Reviewer /Date      Digitally signed by MW Rigler, Ph.D.  
Date: 2018.09.06 14:29:27 -0400

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 2			Length	Width	G. O. Area
Date of Analysis	7/19/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm <sup>2</sup>			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Fiber	Tremolite	8	1.5	5.3	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.4	0.2	32.0	X	X
3	A8-E5	Bundle	Tremolite	10	0.8	12.5	X	X
NSD	A8-E6							
4	A8-E7	Bundle	Tremolite	6.4	1	6.4	X	X
5	A8-E8	Fiber	Tremolite	15	0.9	16.7	X	X
6	A8-E9	Bundle	Tremolite	43	6	7.2	X	X
NSD	A8-F1							
7	A8-F2	Bundle	Tremolite	8.4	1.3	6.5	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	10.4	1	10.4	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
9	A8-G5	Bundle	Tremolite	5.8	0.8	7.3	X	X
10	A8-G6	Fiber	Tremolite	4.8	0.8	6.0	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00002817
Filter size	201.1
Number of Structures Counted	10
Structures per Gram of Sample	3.55E+05

Detection Limit	3.55E+04
Analytical Sensitivity	3.55E+04

Digitally signed by MW Rigler, Ph.D.  
Reviewer / Date: 2018.09.06.14:29:46 -04'00'

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 3			Length	Width	G. O. Area
Date of Analysis	7/16/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Fiber	Tremolite	8.1	1.44	5.6	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.62	0.24	27.6	X	X
3	A8-E5	Bundle	Tremolite	9.89	0.92	10.8	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.94	1.3	5.3	X	X
5	A8-E8	Bundle	Tremolite	15.56	1.42	11.0	X	X
6	A8-E9	Bundle	Tremolite	45.6	7.5	6.1	X	X
NSD	A8-F1							
NSD	A8-F10							
7	A8-F2	Fiber	Tremolite	8.82	1.47	6.0	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	19.68	1.45	13.6	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
NSD	A8-G5							
9	A8-G6	Bundle	Tremolite	5.34	1.02	5.2	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00002817	g
Filter size	201.1	mm <sup>2</sup>
Number of Structures Counted	9	Str.
Structures per Gram of Sample	3.20E+05	Str./g

Detection Limit	3.55E+04	Str./g
Analytical Sensitivity	3.55E+04	Str./g

Reviewer /Date Digitally signed by MW Rigler, Ph.D.  
Date: 2018.09.06.14:29:53 -04'00'

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 4			Length	Width	G. O. Area
Date of Analysis	7/11/2018 - 7/12/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Bundle	Tremolite	8.8	1.3	6.8	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	5.9	0.2	29.5	X	X
3	A8-E5	Fiber	Tremolite	10.1	0.84	12.0	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.8	0.84	8.1	X	X
5	A8-E8	Fiber	Tremolite	13.8	0.9	15.3	X	X
6	A8-E9	Fiber	Tremolite	39.5	6.4	6.2		
NSD	A8-F1							
NSD	A8-F10							
7	A8-F2	Bundle	Tremolite	8.2	1.4	5.9	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Fiber	Tremolite	18.6	1.1	16.9	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
9	A8-G4	Fiber	Tremolite	4.5	0.8	5.6	X	X
NSD	A8-G5							
10	A8-G6	Bundle	Tremolite	4.6	0.8	5.8	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00002817	g
Filter size	201.1	mm <sup>2</sup>
Number of Structures Counted	10	Str.
Structures per Gram of Sample	3.55E+05	Str./g

Detection Limit	3.55E+04	Str./g
Analytical Sensitivity	3.55E+04	Str./g

Reviewer /Date Digitally signed by MW Rigler, Ph.D.  
Date: 2018.09.06 14:30:08 -0400

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 1			Length	Width	G. O. Area
Date of Analysis	8/7/18 - 8/8/18		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	6.5	0.46	14.1	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
NSD	A4-A4	Bundle	Anthophyllite	6.3	1.4	4.5	X	X
2	A4-A5	Bundle	Anthophyllite	56.8	2.3	24.7	X	X
3	A4-A6	Bundle	Anthophyllite	43.9	1.2	36.6	X	X
4	A4-A7	Bundle	Anthophyllite	43.5	3.8	11.4	X	X
NSD	A4-A8							
5	A4-A9	Bundle	Anthophyllite	28.8	4.6	6.3	X	X
6	A4-D10	Bundle	Anthophyllite	19.4	1.8	10.8	X	X
NSD	A4-D6							
7	A4-D7	Bundle	Anthophyllite	8.6	1.3	6.6	X	X
8	A4-D8	Bundle	Anthophyllite	9.2	1	9.2	X	X
9	A4-D8	Bundle	Anthophyllite	11.2	2.1	5.3	X	X
10	A4-D9	Fiber	Anthophyllite	5.9	1	5.9	X	X
11	A4-D9	Fiber	Anthophyllite	10.5	1.8	5.8	X	X
NSD	A4-E1							
12	A4-E10	Bundle	Anthophyllite	19.9	0.8	24.9	X	X
13	A4-E10	Fiber	Anthophyllite	4.8	0.3	16.0	X	X
14	A4-E2	Fiber	Anthophyllite	22.4	2.3	9.7	X	X
15	A4-E3	Fiber	Anthophyllite	6.6	0.7	9.4	X	X
NSD	A4-E4							
NSD	A4-E5							
16	A4-E6	Fiber	Anthophyllite	7.1	0.9	7.9	X	X
17	A4-E7	Bundle	Anthophyllite	49.8	2.9	17.2	X	X
NSD	A4-E8							
18	A4-E9	Fiber	Anthophyllite	3.9	0.6	6.5	X	X
19	A4-E9	Bundle	Anthophyllite	21.1	1.3	16.2	X	X
20	A4-E9	Bundle	Anthophyllite	11.3	1.5	7.5	X	X

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0 g
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00004084 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	20 Str.
per Gram of Sample	4.90E+05 Str./g

Detection Limit	2.45E+04 Str./g
Analytical Sensitivity	2.45E+04 Str./g

Digitally signed by MW Rigler, Ph.D.  
Reviewer /Date Date: 2018.09.06 14:30:21 -0400

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8817	No. of Grids Counted	2
Analyst:	Analyst 2		G. O. in microns =	Length	Width	G. O. Area
Date of Analysis	8/2/2018			105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis			Grid Acceptance	Yes	Average
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Bundle	Anthophyllite	7	0.5	14.0	X	X
2	A4-A1	Bundle	Anthophyllite	30.2	2	15.1	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
3	A4-A4	Fiber	Anthophyllite	5.8	1	5.8	X	X
4	A4-A5	Bundle	Anthophyllite	52	2	26.0	X	X
5	A4-A6	Bundle	Anthophyllite	42	0.9	46.7	X	X
6	A4-A7	Bundle	Anthophyllite	44	4.5	9.8	X	X
NSD	A4-A8							
7	A4-A9	Bundle	Anthophyllite	40	2	20.0	X	X
8	A4-D10	Bundle	Anthophyllite	18	2	9.0	X	X
NSD	A4-D6							
9	A4-D7	Bundle	Anthophyllite	8	1.2	6.7	X	X
10	A4-D8	Bundle	Anthophyllite	8.5	0.8	10.6	X	X
11	A4-D8	Bundle	Anthophyllite	10.5	2	5.3		
12	A4-D9	Fiber	Anthophyllite	6	0.9	6.7	X	X
13	A4-D9	Bundle	Anthophyllite	10	1.7	5.9	X	X
NSD	A4-E1							
14	A4-E10	Fiber	Anthophyllite	4.4	0.3	14.7	X	X
15	A4-E10	Bundle	Anthophyllite	20	0.6	33.3	X	X
16	A4-E2	Fiber	Anthophyllite	22	2	11.0	X	X
17	A4-E3	Fiber	Anthophyllite	6.3	0.8	7.9	X	X
NSD	A4-E4							
NSD	A4-E5							
18	A4-E6	Fiber	Anthophyllite	7	0.8	8.8	X	X
19	A4-E7	Bundle	Anthophyllite	50	3	16.7	X	X
NSD	A4-E8							
20	A4-E9	Bundle	Anthophyllite	10.5	1.5	7.0	X	X
21	A4-E9	Fiber	Anthophyllite	3.7	0.6	6.2	X	X
22	A4-E9	Bundle	Anthophyllite	20.6	1.5	13.7	X	X

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0 g
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00004094 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	22 Str.
Structures per Gram of Sample	5.39E+05 Str./g

Detection Limit	2.45E+04 Str./g
Analytical Sensitivity	2.45E+04 Str./g

Digitally signed by MW Rigler, Ph.D.  
Reviewer /Date Date: 2018.09.06 14:30:35 -04'00'

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 3			Length	Width	G. O. Area
Date of Analysis	7/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	7.36	0.46	16.0	X	X
2	A4-A1	Bundle	Anthophyllite	33.12	1.84	18.0	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
NSD	A4-A4	Bundle	Anthophyllite	6.39	1.38	4.6	X	X
3	A4-A5	Bundle	Anthophyllite	57.5	2.76	20.8	X	X
4	A4-A6	Bundle	Anthophyllite	44.16	1.38	32.0	X	X
5	A4-A7	Bundle	Anthophyllite	46	4.14	11.1	X	X
NSD	A4-A8							
6	A4-A9	Bundle	Anthophyllite	30.3	5.06	6.0	X	X
7	A4-D10	Bundle	Anthophyllite	19.32	1.68	11.5	X	X
NSD	A4-D6							
8	A4-D7	Fiber	Anthophyllite	8.61	1.26	6.8	X	X
9	A4-D8	Bundle	Anthophyllite	8.4	0.92	9.1	X	X
10	A4-D8	Fiber	Anthophyllite	10.92	2.1	5.2	X	X
11	A4-D9	Fiber	Anthophyllite	5.67	1.01	5.6	X	X
12	A4-D9	Fiber	Anthophyllite	11.34	1.68	6.8	X	X
NSD	A4-E1							
13	A4-E10	Bundle	Anthophyllite	19.06	2.94	6.1	X	X
14	A4-E10	Fiber	Anthophyllite	17.01	0.34	50.0	X	X
15	A4-E2	Fiber	Anthophyllite	22.26	2.52	8.8	X	X
16	A4-E3	Fiber	Anthophyllite	6.93	0.67	10.3	X	X
NSD	A4-E4							
NSD	A4-E5							
17	A4-E6	Fiber	Anthophyllite	7.14	0.76	9.4	X	X
18	A4-E7	Bundle	Anthophyllite	49.14	2.94	16.7	X	X
NSD	A4-E8							
19	A4-E9	Fiber	Anthophyllite	3.99	0.59	6.8	X	X
20	A4-E9	Bundle	Anthophyllite	17.64	1.26	14.0	X	X

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0 g
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00004084 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	20 Str.
per Gram of Sample	4.90E+05 Str./g

Detection Limit	2.45E+04 Str./g
Analytical Sensitivity	2.45E+04 Str./g

Digitally signed by MW Rigler, Ph.D.  
Reviewer /Date: 2018.09.06 14:30:48 -04'00'



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 4			Length	Width	G. O. Area
Date of Analysis	7/23/2018 - 7/25/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	6.4	0.38	16.8	X	X
2	A4-A1	Bundle	Anthophyllite	31.5	2.2	14.3	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
3	A4-A4	Bundle	Anthophyllite	5.5	1.2	4.6	X	X
4	A4-A5	Bundle	Anthophyllite	55.5	2.4	23.1	X	X
5	A4-A6	Bundle	Anthophyllite	43.6	1.2	36.3	X	X
6	A4-A7	Bundle	Anthophyllite	43.2	3.6	12.0	X	X
NSD	A4-A8							
7	A4-A9	Bundle	Anthophyllite	27.5	4.4	6.3	X	X
8	A4-D10	Bundle	Anthophyllite	18.9	1.7	11.1	X	X
NSD	A4-D6							
9	A4-D7	Bundle	Anthophyllite	8.3	1.2	6.9	X	X
10	A4-D8	Bundle	Anthophyllite	9.3	1.1	8.5	X	X
11	A4-D8	Bundle	Anthophyllite	11.1	1.8	6.2	X	X
12	A4-D9	Bundle	Anthophyllite	6.3	0.82	7.7	X	X
13	A4-D9	Fiber	Anthophyllite	10.1	1.5	6.7	X	X
NSD	A4-E1							
14	A4-E10	Fiber	Anthophyllite	4.2	0.24	17.5	X	X
15	A4-E10	Bundle	Anthophyllite	19.3	0.84	23.0	X	X
16	A4-E2	Fiber	Anthophyllite	22.3	2.1	10.6	X	X
17	A4-E3	Fiber	Anthophyllite	6.3	0.68	9.3	X	X
NSD	A4-E4							
NSD	A4-E5							
18	A4-E6	Fiber	Anthophyllite	7.8	0.7	11.1	X	X
19	A4-E7	Bundle	Anthophyllite	50.2	3.1	16.2	X	X
NSD	A4-E8							
20	A4-E9	Bundle	Anthophyllite	10.4	1.2	8.7	X	X
21	A4-E9	Bundle	Anthophyllite	21.3	1.2	17.8	X	X
22	A4-E9	Fiber	Anthophyllite	3.7	0.5	7.4	X	X

Org. Sample Sample Wt. Post  
Wt. HL Separation

0.02980	0	g
Percent of Orig. Post Separation	0	(%)

Wt. Of Sample Analyzed	0.00004084	g
Filter size	201.1	mm <sup>2</sup>
Number of Structures Counted	22	Str.
Structures per Gram of Sample	5.39E+05	Str./g

Detection  
Limit

2.45E+04 Str./g

Analytical  
Sensitivity

2.45E+04 Str./g

Digitally signed by MW Rigler, Ph.D.  
Reviewer Date Date: 2018.09.06 14:31:03 -04'00'

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 1		Length	Width	G. O. Area	
Date of Analysis	7/16/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Bundle	Tremolite	8.9	1.4	6.4	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.6	0.2	33.0	X	X
3	A8-E5	Bundle	Tremolite	10	1	10.0	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.9	1.3	5.3	X	X
5	A8-E8	Bundle	Tremolite	15.3	1.1	13.9	X	X
6	A8-E9	Bundle	Tremolite	43.2	6.9	6.3	X	X
NSD	A8-F10							
7	A8-F2	Bundle	Tremolite	9	1.4	6.4	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	18.9	1.2	15.8	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
NSD	A8-G5							
9	A8-G6	Bundle	Tremolite	4.9	0.92	5.3	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Sample Wt. Post  
Wt. HL Separation

0.02055	0	g
Percent of Orig. Post Separation	0	(%)

Wt. Of  
Sample  
Analyzed  
Filter size  
Number of  
Structures  
Counted  
Structures  
per Gram of  
Sample

0.00002817	g
201.1	mm <sup>2</sup>
9	Str.
3.20E+05	Str./g

Detection  
Limit  
Analytical  
Sensitivity

3.55E+04	Str./g
3.55E+04	Str./g

Digitally signed by MW Rigler, Ph.D.  
Reviewer /Date Date: 2018.09.06 14:29:27 -0400:...

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Anthony Keeton			Length	Width	G. O. Area
Date of Analysis	7/16/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

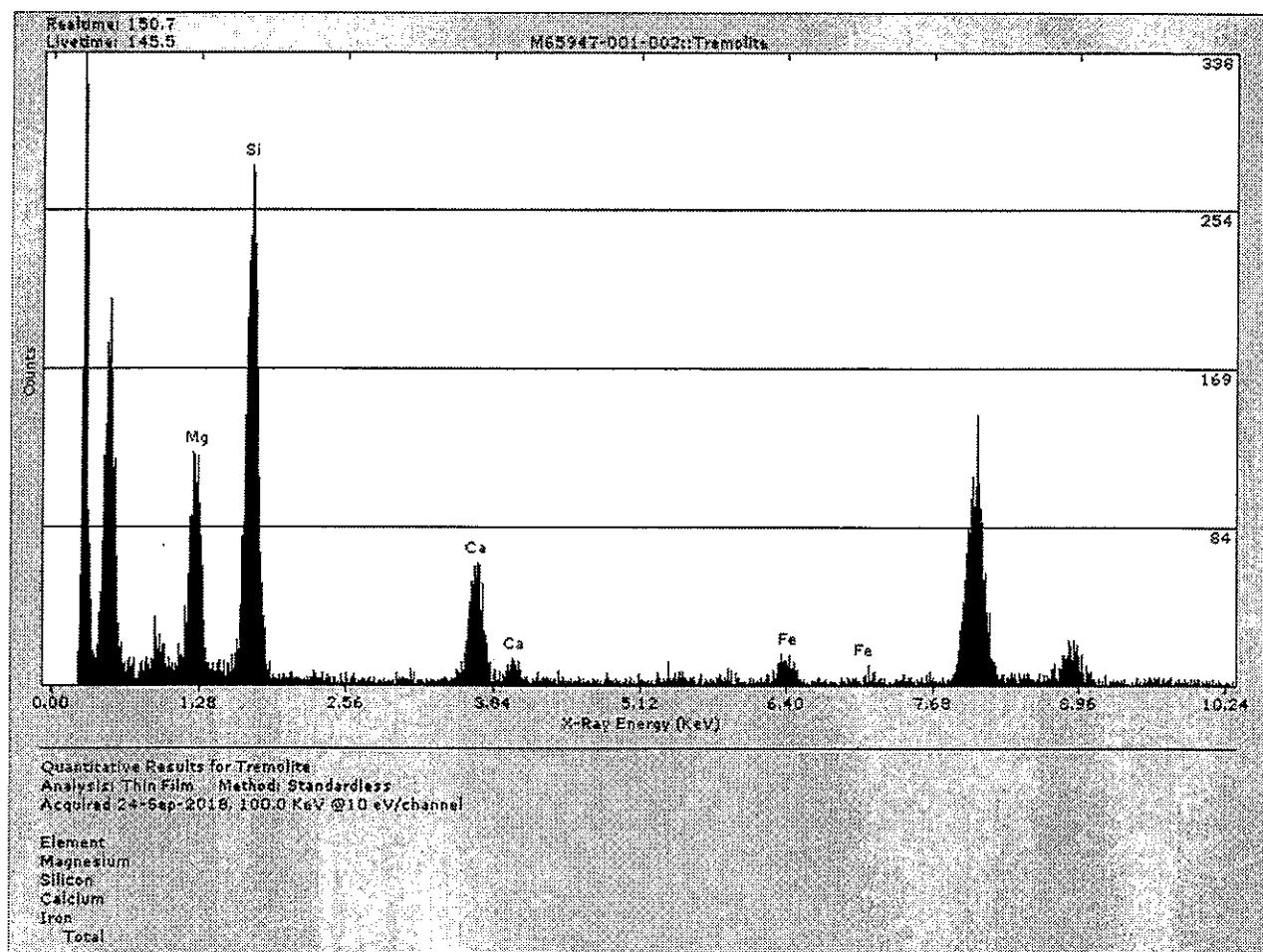
Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Bundle	Tremolite	8.9	1.4	6.4	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.6	0.2	33.0	X	X
3	A8-E5	Bundle	Tremolite	10	1	10.0	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.9	1.3	5.3	X	X
5	A8-E8	Bundle	Tremolite	15.3	1.1	13.9	X	X
6	A8-E9	Bundle	Tremolite	43.2	6.9	6.3	X	X
NSD	A8-F10							
7	A8-F2	Bundle	Tremolite	9	1.4	6.4	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	18.9	1.2	15.8	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
NSD	A8-G5							
9	A8-G6	Bundle	Tremolite	4.9	0.92	5.3	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

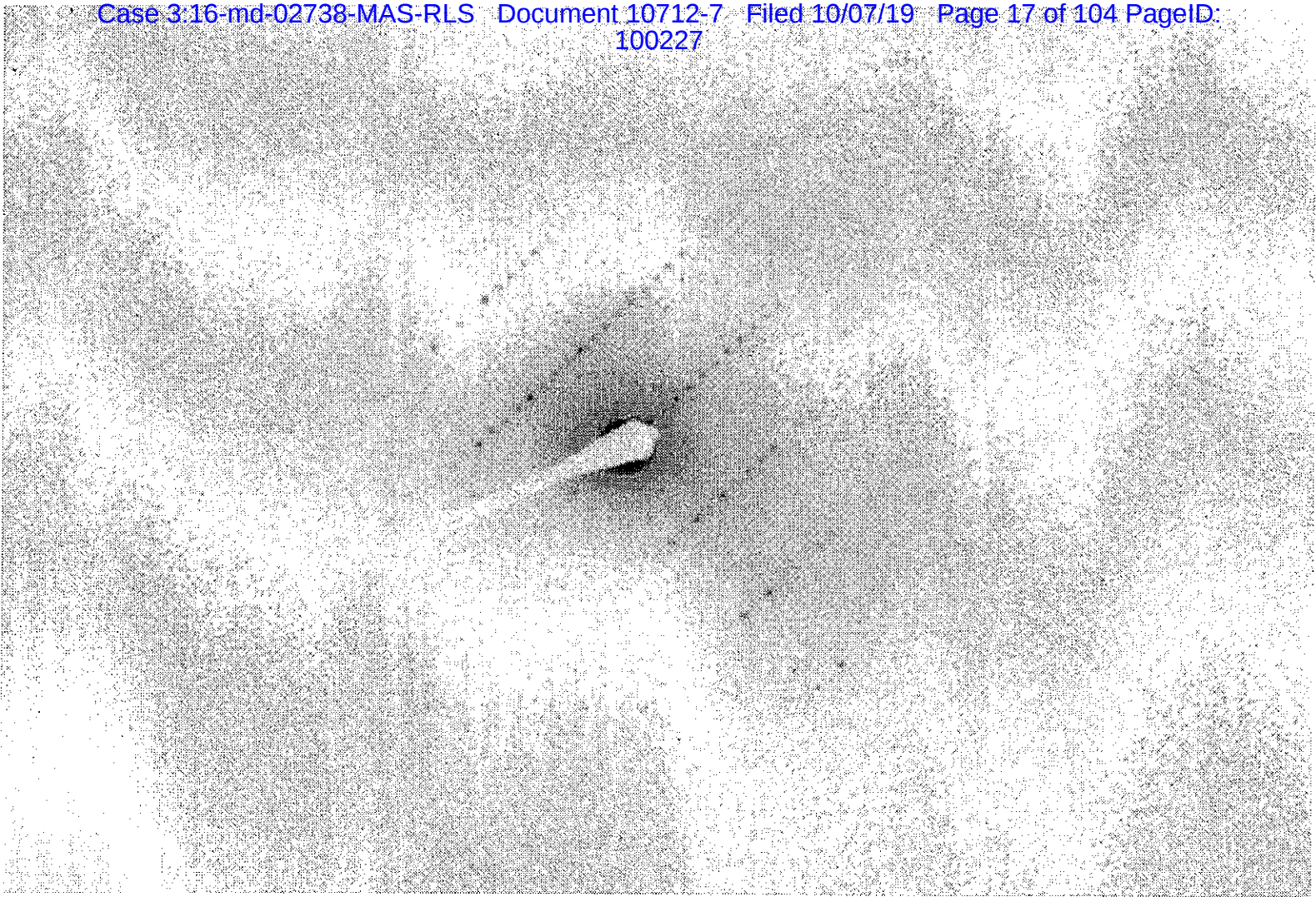
Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0 g
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00002817 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	9 Str.
Structures per Gram of Sample	3.20E+05 Str./g

Detection Limit	3.55E+04 Str./g
Analytical Sensitivity	3.55E+04 Str./g

Reviewer /Date \_\_\_\_\_



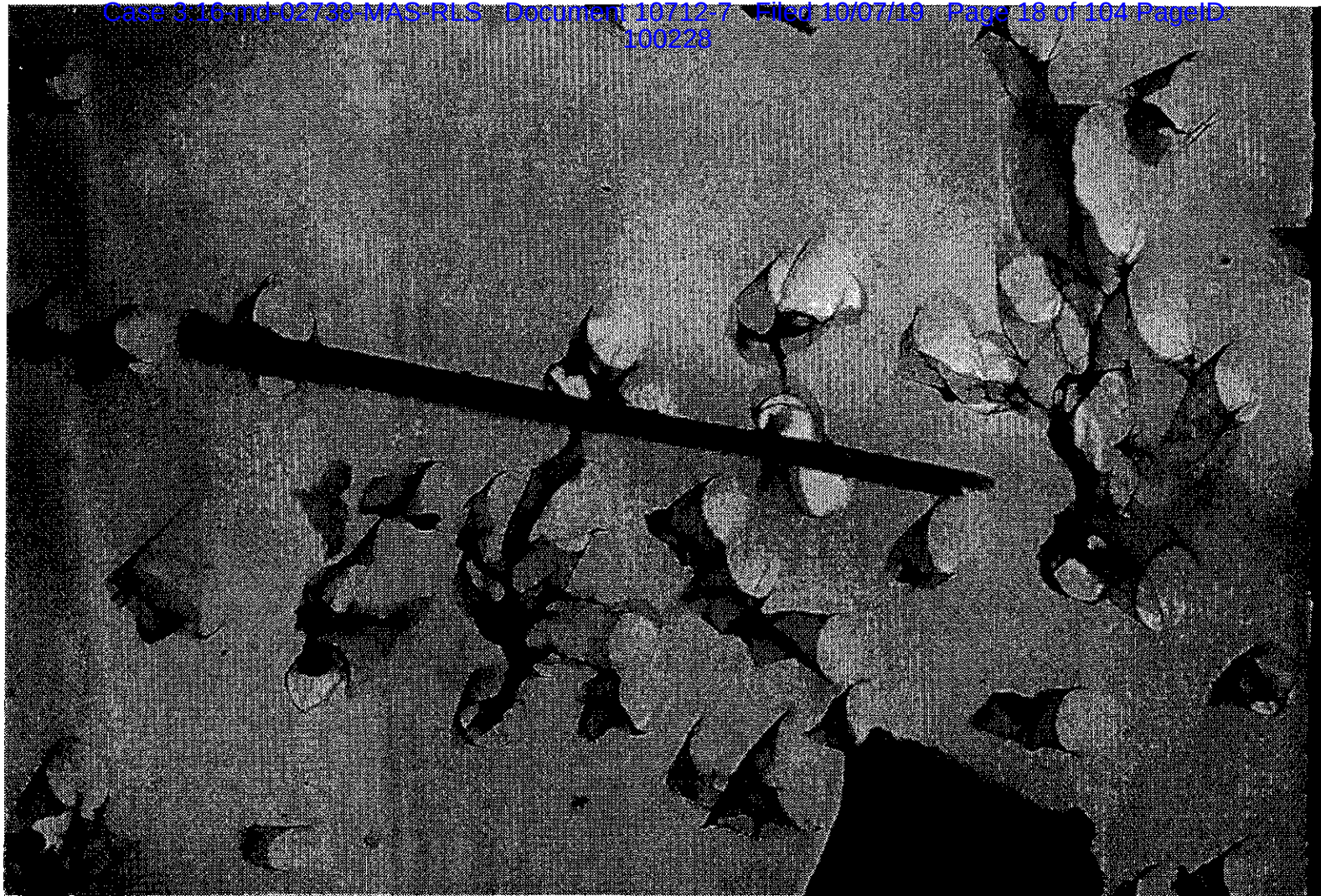


2 4508

M65947-001-002 Tremolite Diffraction @ 50cm

9/24/2018





2 4510

M65947-001-002 Tremolite ( 6.6 um x 0.2 um)

9/24/2018

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M68947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 1			Length	Width	G. O. Area
Date of Analysis	8/7/18 - 8/8/18		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	8.5	0.48	14.1	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
NSD	A4-A4	Bundle	Anthophyllite	6.3	1.4	4.5	X	X
2	A4-A5	Bundle	Anthophyllite	56.8	2.3	24.7	X	X
3	A4-A6	Bundle	Anthophyllite	43.9	1.2	36.6	X	X
4	A4-A7	Bundle	Anthophyllite	43.5	3.8	11.4	X	X
NSD	A4-A8							
5	A4-A9	Bundle	Anthophyllite	26.8	4.6	6.3	X	X
6	A4-D10	Bundle	Anthophyllite	19.4	1.8	10.8	X	X
NSD	A4-D6							
7	A4-D7	Bundle	Anthophyllite	8.6	1.3	6.6	X	X
8	A4-D8	Bundle	Anthophyllite	9.2	1	9.2	X	X
9	A4-D8	Bundle	Anthophyllite	11.2	2.1	5.3	X	X
10	A4-D9	Fiber	Anthophyllite	5.9	1	5.9	X	X
11	A4-D9	Fiber	Anthophyllite	10.5	1.8	5.8	X	X
NSD	A4-E1							
12	A4-E10	Bundle	Anthophyllite	19.9	0.8	24.9	X	X
13	A4-E10	Fiber	Anthophyllite	4.6	0.3	16.0	X	X
14	A4-E2	Fiber	Anthophyllite	22.4	2.3	9.7	X	X
15	A4-E3	Fiber	Anthophyllite	6.6	0.7	9.4	X	X
NSD	A4-E4							
NSD	A4-E5							
16	A4-E6	Fiber	Anthophyllite	7.1	0.9	7.9	X	X
17	A4-E7	Bundle	Anthophyllite	49.8	2.9	17.2	X	X
NSD	A4-E8							
18	A4-E9	Fiber	Anthophyllite	3.9	0.6	6.5	X	X
19	A4-E9	Bundle	Anthophyllite	21.1	1.3	16.2	X	X
20	A4-E9	Bundle	Anthophyllite	11.3	1.5	7.5	X	X

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0 g
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00804084 g
Filter size	201.1 mm²
Number of Structures Counted	20 Str.
Structures per Gram of Sample	4.90E+05 Str./g

Detection Limit	2.45E+04 Str./g
Analytical Sensitivity	2.45E+04 Str./g

Digitally signed by MW Rygier, Ph.D.  
Reviewer / Date: 2018.09.06 14:30:21 -0400

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Anthony Keeton			Length	Width	G. O. Area
Date of Analysis	8/7/18 - 8/8/18		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm <sup>2</sup>			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	6.5	0.46	14.1	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
NSD	A4-A4	Bundle	Anthophyllite	6.3	1.4	4.5	X	X
2	A4-A5	Bundle	Anthophyllite	56.8	2.3	24.7	X	X
3	A4-A6	Bundle	Anthophyllite	43.9	1.2	36.6	X	X
4	A4-A7	Bundle	Anthophyllite	43.5	3.8	11.4	X	X
NSD	A4-A8							
5	A4-A9	Bundle	Anthophyllite	28.8	4.6	6.3	X	X
6	A4-D10	Bundle	Anthophyllite	19.4	1.8	10.8	X	X
NSD	A4-D6							
7	A4-D7	Bundle	Anthophyllite	8.6	1.3	6.6	X	X
8	A4-D8	Bundle	Anthophyllite	9.2	1	9.2	X	X
9	A4-D8	Bundle	Anthophyllite	11.2	2.1	5.3	X	X
10	A4-D9	Fiber	Anthophyllite	5.9	1	5.9	X	X
11	A4-D9	Fiber	Anthophyllite	10.5	1.8	5.8	X	X
NSD	A4-E1							
12	A4-E10	Bundle	Anthophyllite	19.9	0.8	24.9	X	X
13	A4-E10	Fiber	Anthophyllite	4.8	0.3	16.0	X	X
14	A4-E2	Fiber	Anthophyllite	22.4	2.3	9.7	X	X
15	A4-E3	Fiber	Anthophyllite	6.6	0.7	9.4	X	X
NSD	A4-E4							
NSD	A4-E5							
16	A4-E6	Fiber	Anthophyllite	7.1	0.9	7.9	X	X
17	A4-E7	Bundle	Anthophyllite	49.8	2.9	17.2	X	X
NSD	A4-E8							
18	A4-E9	Fiber	Anthophyllite	3.9	0.6	6.5	X	X
19	A4-E9	Bundle	Anthophyllite	21.1	1.3	16.2	X	X
20	A4-E9	Bundle	Anthophyllite	11.3	1.5	7.5	X	X

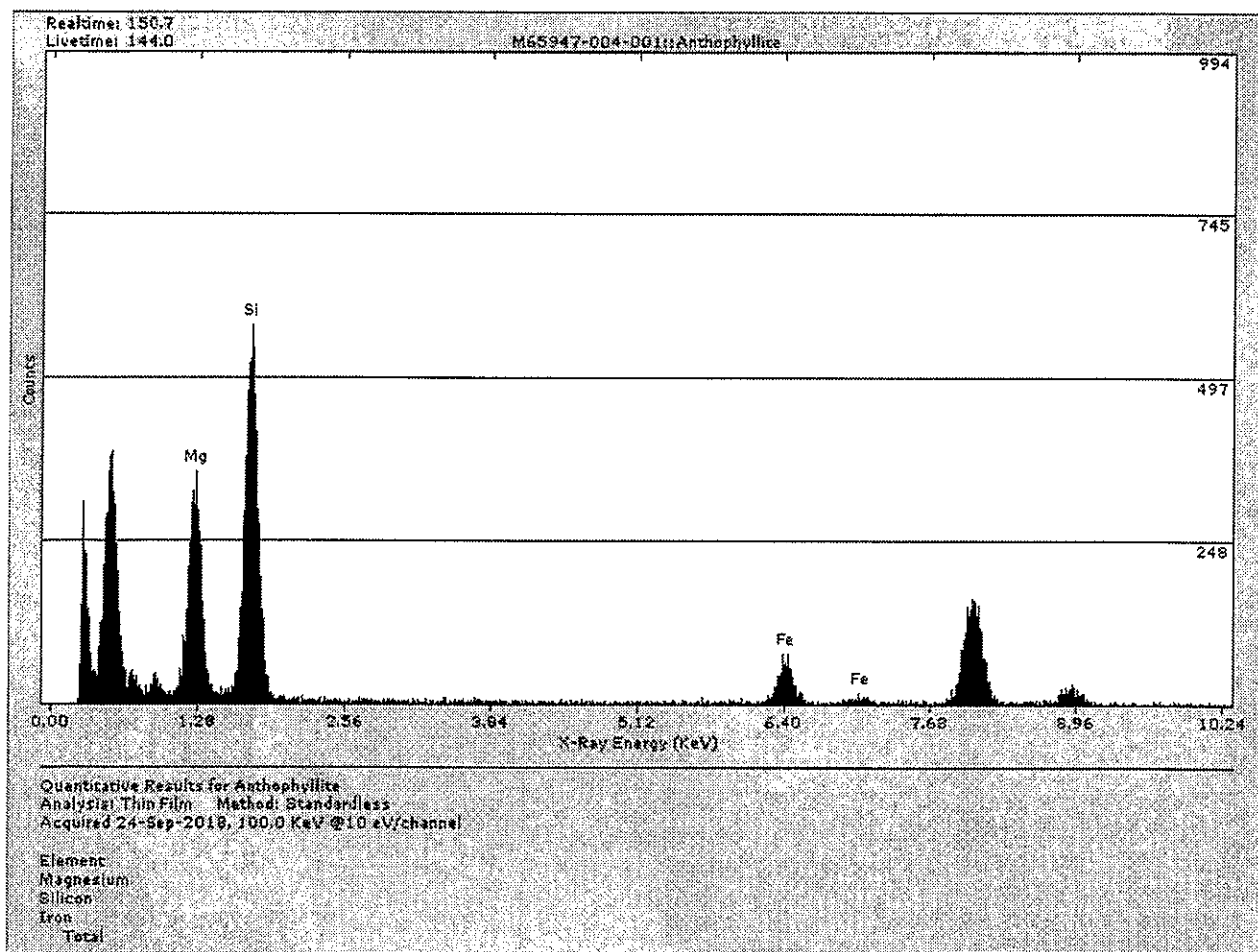
Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0 g
Percent of Orig. Post Separation	0 (%)

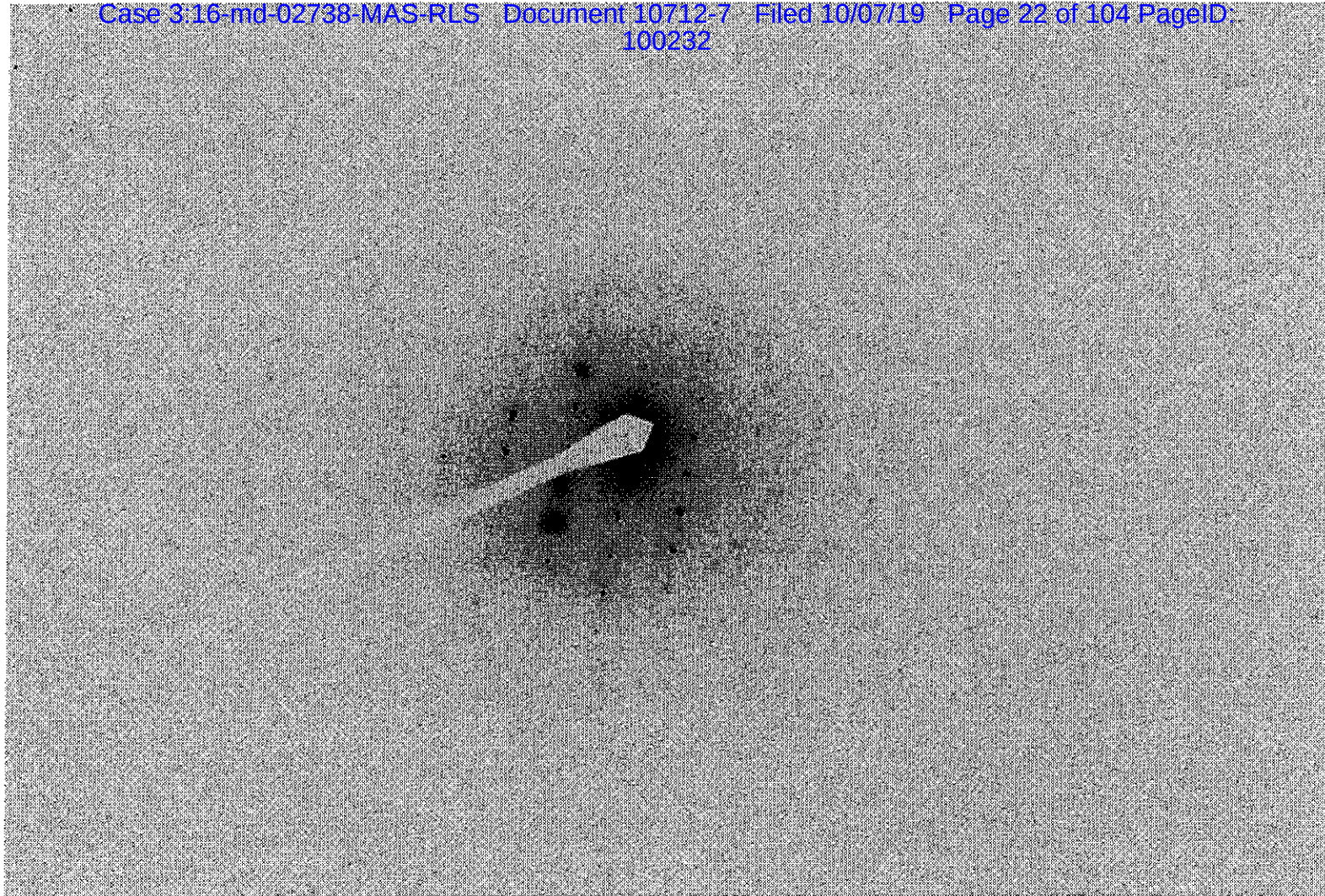
Wt. Of Sample Analyzed	0.00004084 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	20 Str.
Structures per Gram of Sample	4.90E+05 Str./g

Detection Limit	2.45E+04 Str./g
Analytical Sensitivity	2.45E+04 Str./g

Reviewer /Date \_\_\_\_\_







2 4504

M65947-004-001 Anthophyllite Diffraction @ 50cm

9/24/2018



2 4505

M65947-004-001 Anthophyllite (6.5 um x 0.46 um)

9/24/2018



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 2			Length	Width	G. O. Area
Date of Analysis	7/19/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.# Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.278

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Fiber	Tremolite	8	1.5	5.3	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.4	0.2	32.0	X	X
3	A8-E5	Bundle	Tremolite	10	0.8	12.5	X	X
NSD	A8-E6							
4	A8-E7	Bundle	Tremolite	6.4	0.6	6.4	X	X
5	A8-E8	Fiber	Tremolite	15	0.9	16.7	X	X
6	A8-E9	Bundle	Tremolite	43	6	7.2	X	X
NSD	A8-F1							
7	A8-F2	Bundle	Tremolite	8.4	1.3	6.5	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	10.4	1	10.4	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
9	A8-G5	Bundle	Tremolite	5.8	0.8	7.3	X	X
10	A8-G6	Fiber	Tremolite	4.8	0.8	6.0	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00002817
Filter size	201.1
Number of Structures Counted	10
Structures per Gram of Sample	3.55E+05

Detection Limit	3.55E+04
Analytical Sensitivity	3.55E+04

Digitally signed by MW Rigler, Ph.D.  
Reviewer / Date: 2018.09.08 14:29:40 -0400

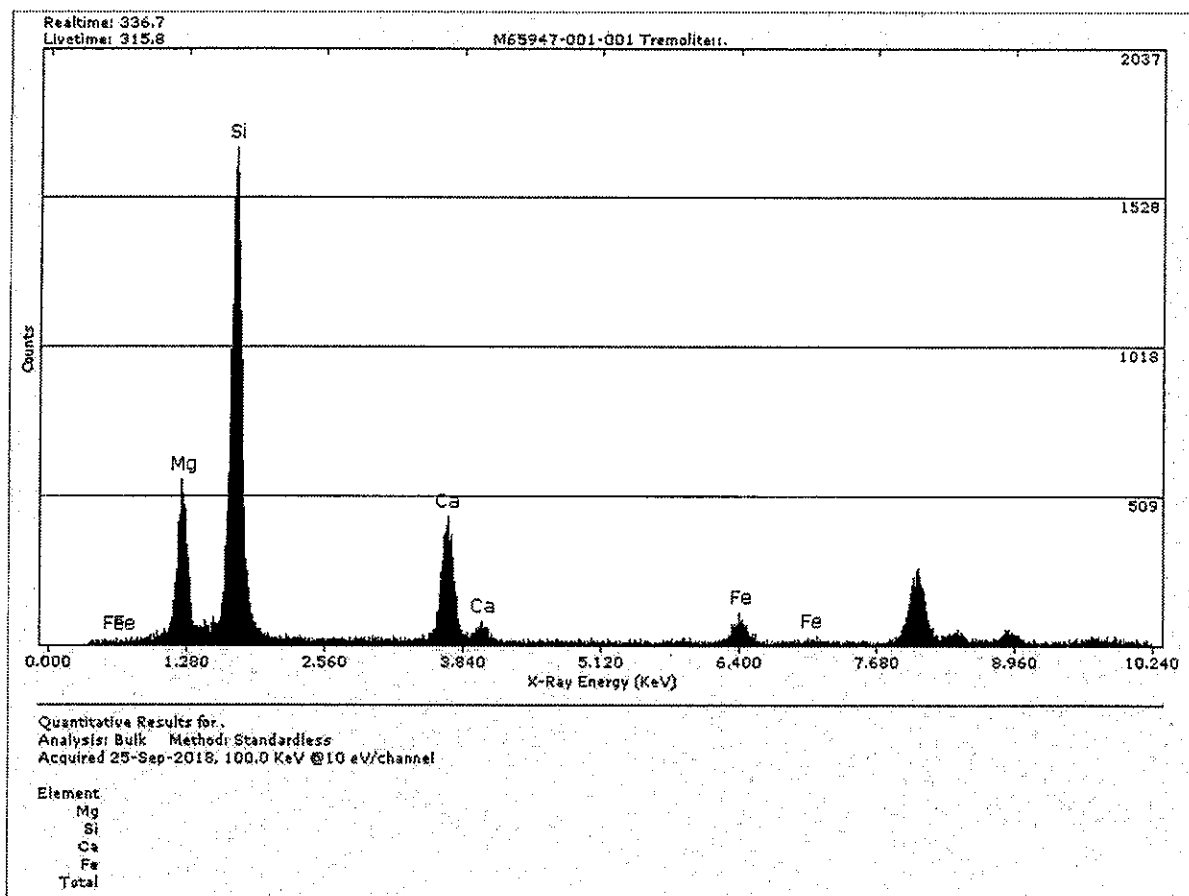
TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Merhdad Motamedi			Length	Width	G. O. Area
Date of Analysis	7/19/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm <sup>2</sup>			0.276

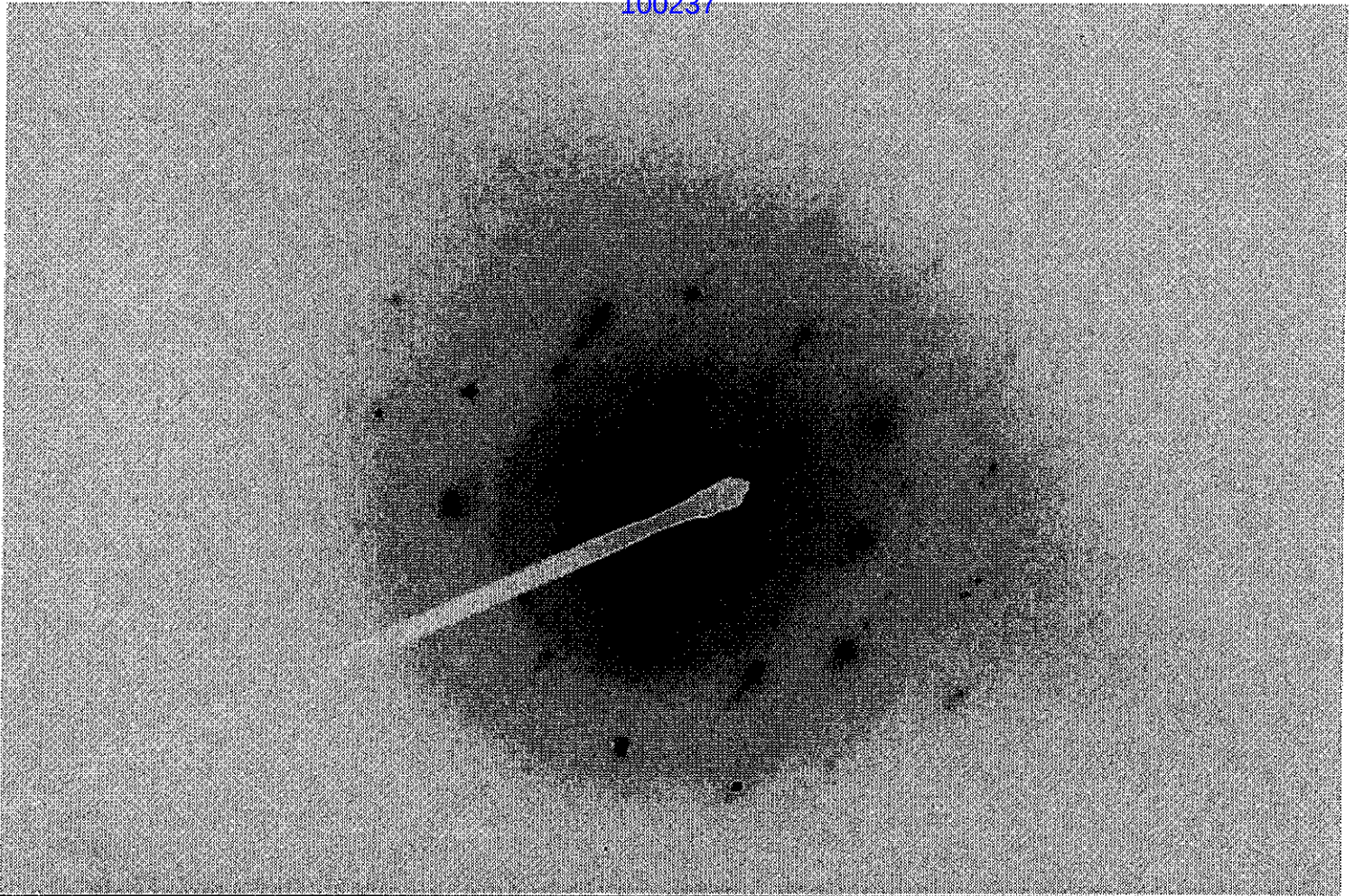
Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Fiber	Tremolite	8	1.5	5.3	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.4	0.2	32.0	X	X
3	A8-E5	Bundle	Tremolite	10	0.8	12.5	X	X
NSD	A8-E6							
4	A8-E7	Bundle	Tremolite	6.4	1	6.4	X	X
5	A8-E8	Fiber	Tremolite	15	0.9	16.7	X	X
6	A8-E9	Bundle	Tremolite	43	6	7.2	X	X
NSD	A8-F1							
7	A8-F2	Bundle	Tremolite	8.4	1.3	6.5	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	10.4	1	10.4	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
9	A8-G5	Bundle	Tremolite	5.8	0.8	7.3	X	X
10	A8-G6	Fiber	Tremolite	4.8	0.8	6.0	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0 g
Percent of Orig. Post Separation	0 (%)
Wt. Of Sample Analyzed	0.00002817 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	10 Str.
Structures per Gram of Sample	3.55E+05 Str./g

Detection Limit	3.55E+04 Str./g
Analytical Sensitivity	3.55E+04 Str./g

Reviewer /Date \_\_\_\_\_



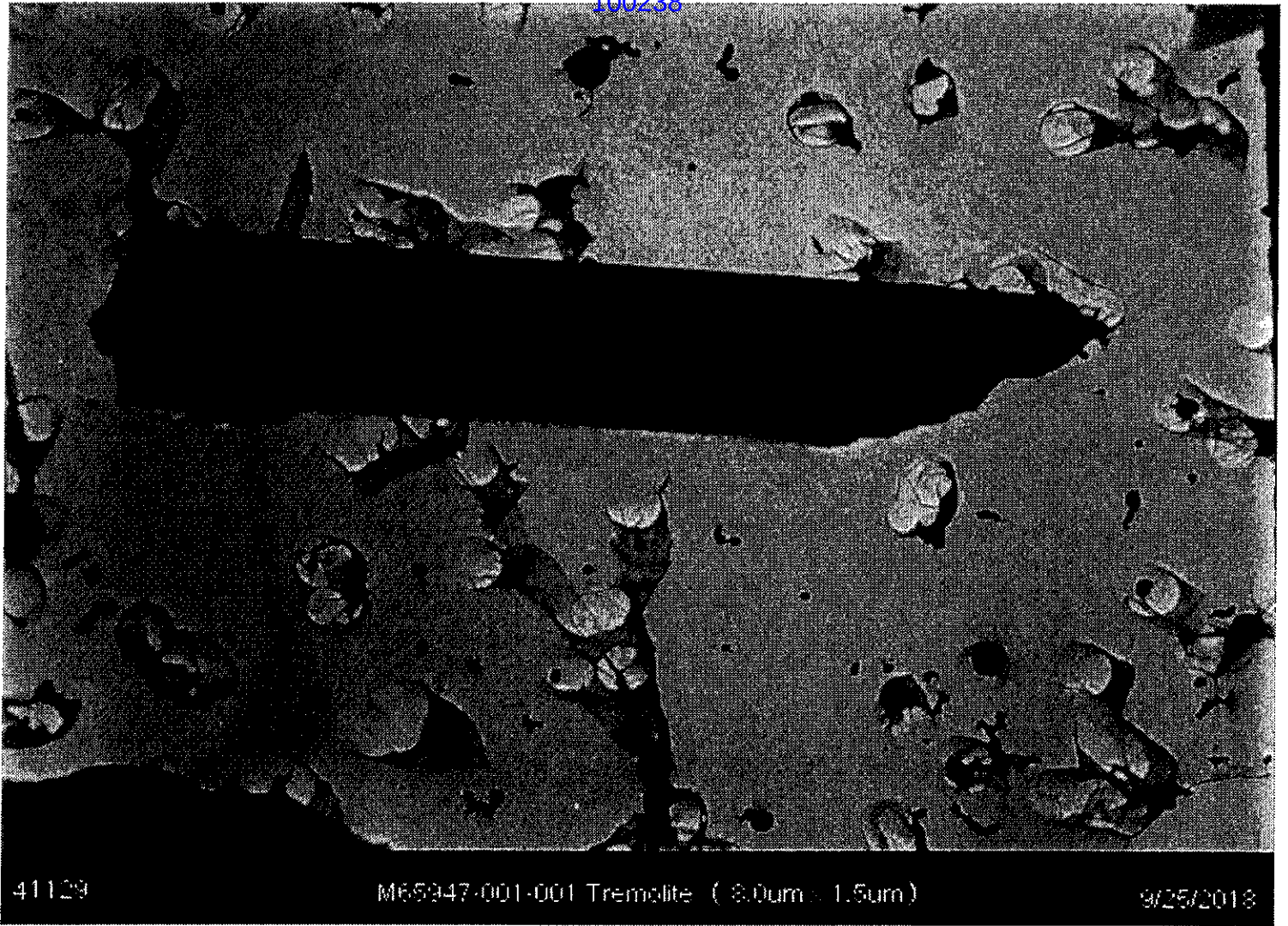


41128

M65947-001-001 Tremolite Diffraction @ 50cm

9/25/2018







TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8817	No. of Grids Counted	2
Analyst:	Analyst 2		Length	Width	G. O. Area	
Date of Analysis	8/2/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm <sup>2</sup>			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Bundle	Anthophyllite	7	0.5	14.0	X	X
2	A4-A1	Bundle	Anthophyllite	30.2	2	15.1	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
3	A4-A4	Fiber	Anthophyllite	5.8	1	5.8	X	X
4	A4-A5	Bundle	Anthophyllite	52	2	26.0	X	X
5	A4-A6	Bundle	Anthophyllite	42	0.9	46.7	X	X
6	A4-A7	Bundle	Anthophyllite	44	4.5	9.8	X	X
NSD	A4-A8							
7	A4-A9	Bundle	Anthophyllite	40	2	20.0	X	X
8	A4-D10	Bundle	Anthophyllite	18	2	9.0	X	X
NSD	A4-D6							
9	A4-D7	Bundle	Anthophyllite	8	1.2	6.7	X	X
10	A4-D8	Bundle	Anthophyllite	5.5	0.6	10.6	X	X
11	A4-D8	Bundle	Anthophyllite	10.5	2	5.3		
12	A4-D9	Fiber	Anthophyllite	6	0.9	6.7	X	X
13	A4-D9	Bundle	Anthophyllite	10	1.7	5.9	X	X
NSD	A4-E1							
14	A4-E10	Fiber	Anthophyllite	4.4	0.3	14.7	X	X
15	A4-E10	Bundle	Anthophyllite	20	0.6	33.3	X	X
16	A4-E2	Fiber	Anthophyllite	22	2	11.0	X	X
17	A4-E3	Fiber	Anthophyllite	6.3	0.8	7.9	X	X
NSD	A4-E4							
NSD	A4-E5							
18	A4-E6	Fiber	Anthophyllite	7	0.8	8.8	X	X
19	A4-E7	Bundle	Anthophyllite	50	3	16.7	X	X
NSD	A4-E8							
20	A4-E9	Bundle	Anthophyllite	10.5	1.5	7.0	X	X
21	A4-E9	Fiber	Anthophyllite	3.7	0.6	6.2	X	X
22	A4-E9	Bundle	Anthophyllite	20.6	1.5	13.7	X	X

Org. Sample Wt.	Sample Wt. Post Ht. Separation	
0.02980	0	g
Percent of Orig. Post Separation	0	(%)

Wt. Of Sample Analyzed	0.00004084	g
Filter size	201.1	mm <sup>2</sup>
Number of Structures Counted	22	Str.
Structures per Gram of Sample	5.39E+05	Str./g

Detection Limit	2.45E+04	Str./g
Analytical Sensitivity	2.45E+04	Str./g

Digitally signed by MW Rigler, Ph.D.  
Reviewer / Date: 2018.09.08 14:30:35 -04'00'

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Merhdad Motamedi			Length	Width	G. O. Area
Date of Analysis	8/2/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

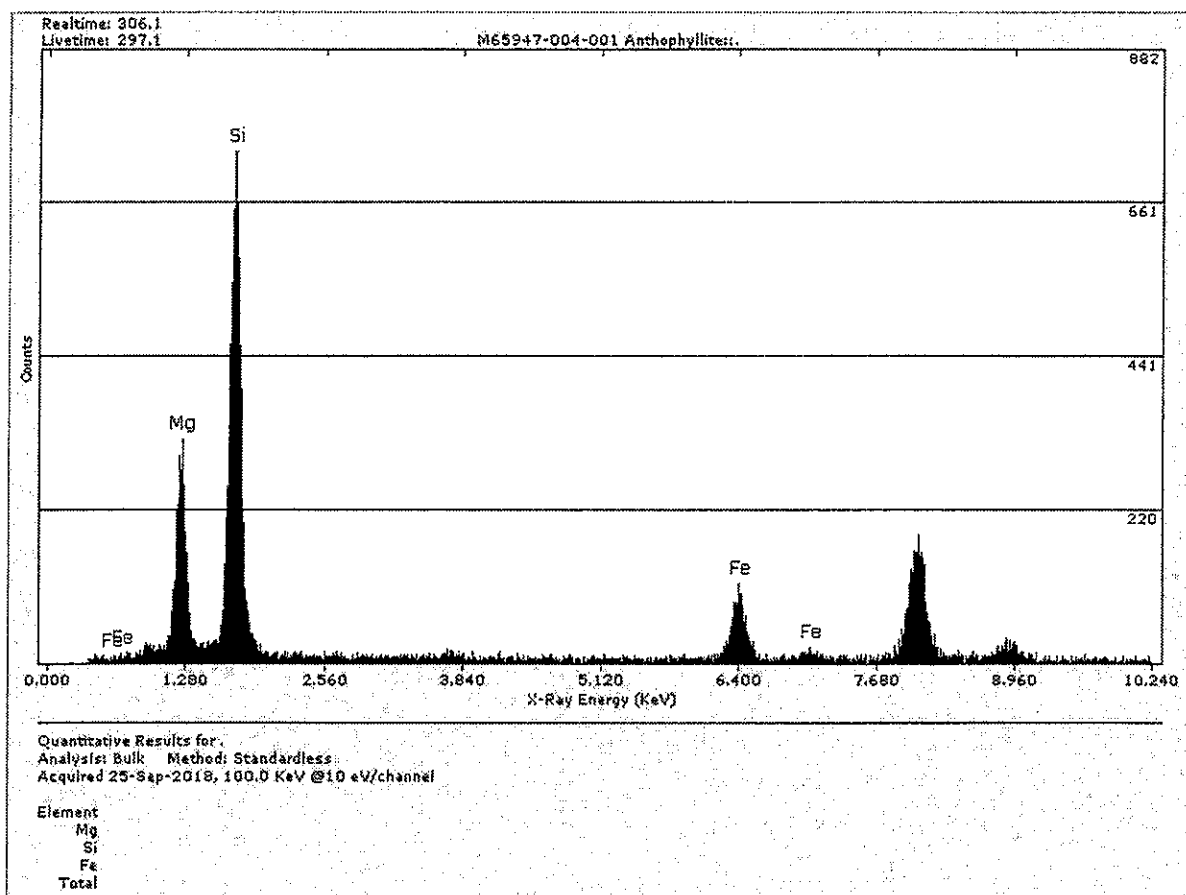
Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Bundle	Anthophyllite	7	0.5	14.0	X	X
2	A4-A1	Bundle	Anthophyllite	30.2	2	15.1	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
3	A4-A4	Fiber	Anthophyllite	5.8	1	5.8	X	X
4	A4-A5	Bundle	Anthophyllite	52	2	26.0	X	X
5	A4-A6	Bundle	Anthophyllite	42	0.9	46.7	X	X
6	A4-A7	Bundle	Anthophyllite	44	4.5	9.8	X	X
NSD	A4-A8							
7	A4-A9	Bundle	Anthophyllite	40	2	20.0	X	X
8	A4-D10	Bundle	Anthophyllite	18	2	9.0	X	X
NSD	A4-D6							
9	A4-D7	Bundle	Anthophyllite	8	1.2	6.7	X	X
10	A4-D8	Bundle	Anthophyllite	8.5	0.8	10.6	X	X
11	A4-D8	Bundle	Anthophyllite	10.5	2	5.3		
12	A4-D9	Fiber	Anthophyllite	6	0.9	6.7	X	X
13	A4-D9	Bundle	Anthophyllite	10	1.7	5.9	X	X
NSD	A4-E1							
14	A4-E10	Fiber	Anthophyllite	4.4	0.3	14.7	X	X
15	A4-E10	Bundle	Anthophyllite	20	0.6	33.3	X	X
16	A4-E2	Fiber	Anthophyllite	22	2	11.0	X	X
17	A4-E3	Fiber	Anthophyllite	6.3	0.8	7.9	X	X
NSD	A4-E4							
NSD	A4-E5							
18	A4-E6	Fiber	Anthophyllite	7	0.8	8.8	X	X
19	A4-E7	Bundle	Anthophyllite	50	3	16.7	X	X
NSD	A4-E8							
20	A4-E9	Bundle	Anthophyllite	10.5	1.5	7.0	X	X
21	A4-E9	Fiber	Anthophyllite	3.7	0.6	6.2	X	X
22	A4-E9	Bundle	Anthophyllite	20.6	1.5	13.7	X	X

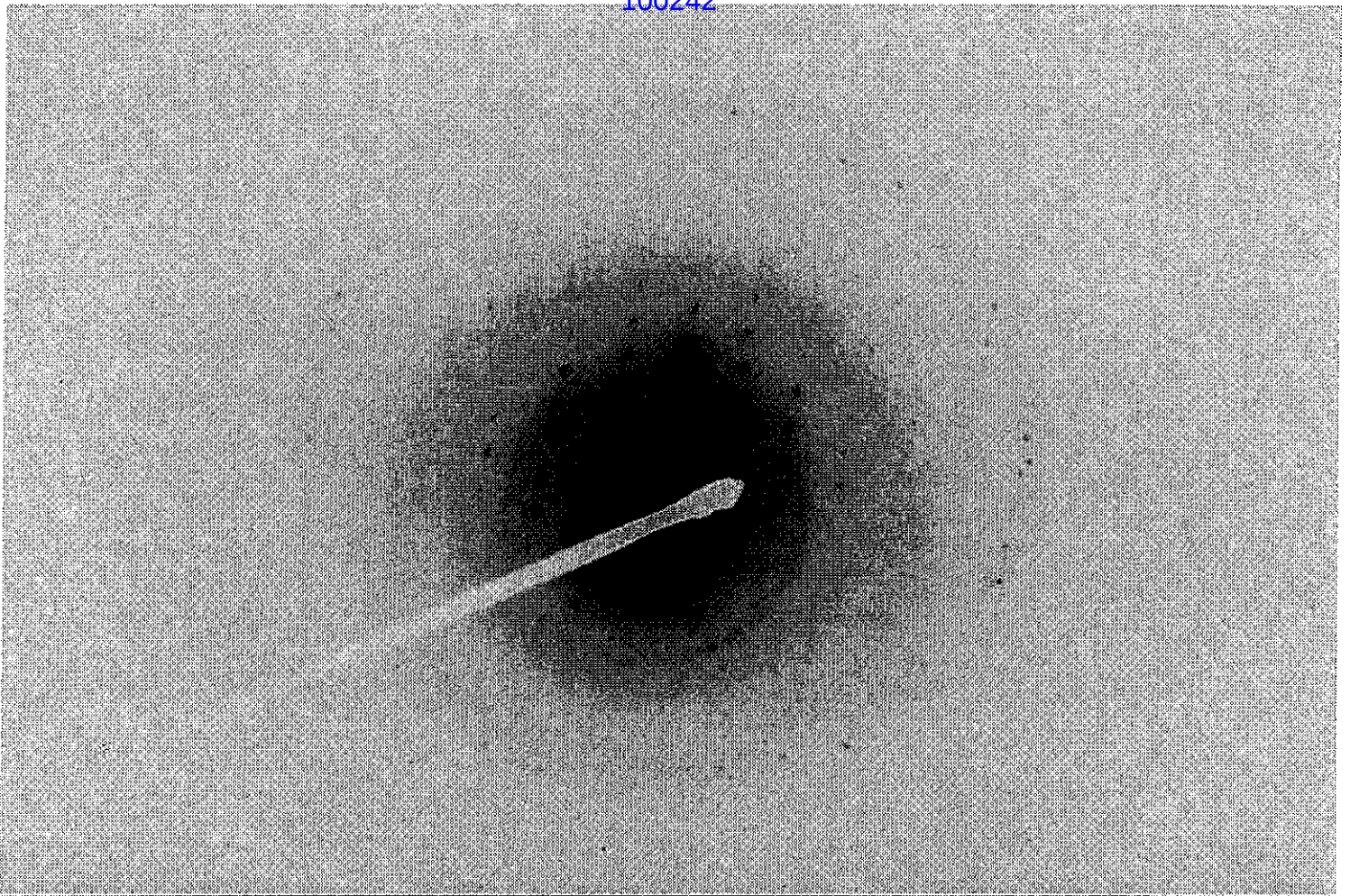
Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00004084	g
Filter size	201.1	mm <sup>2</sup>
Number of Structures Counted	22	Str.
Structures per Gram of Sample	5.39E+05	Str./g

Detection Limit	2.45E+04	Str./g
Analytical Sensitivity	2.45E+04	Str./g

Reviewer /Date \_\_\_\_\_

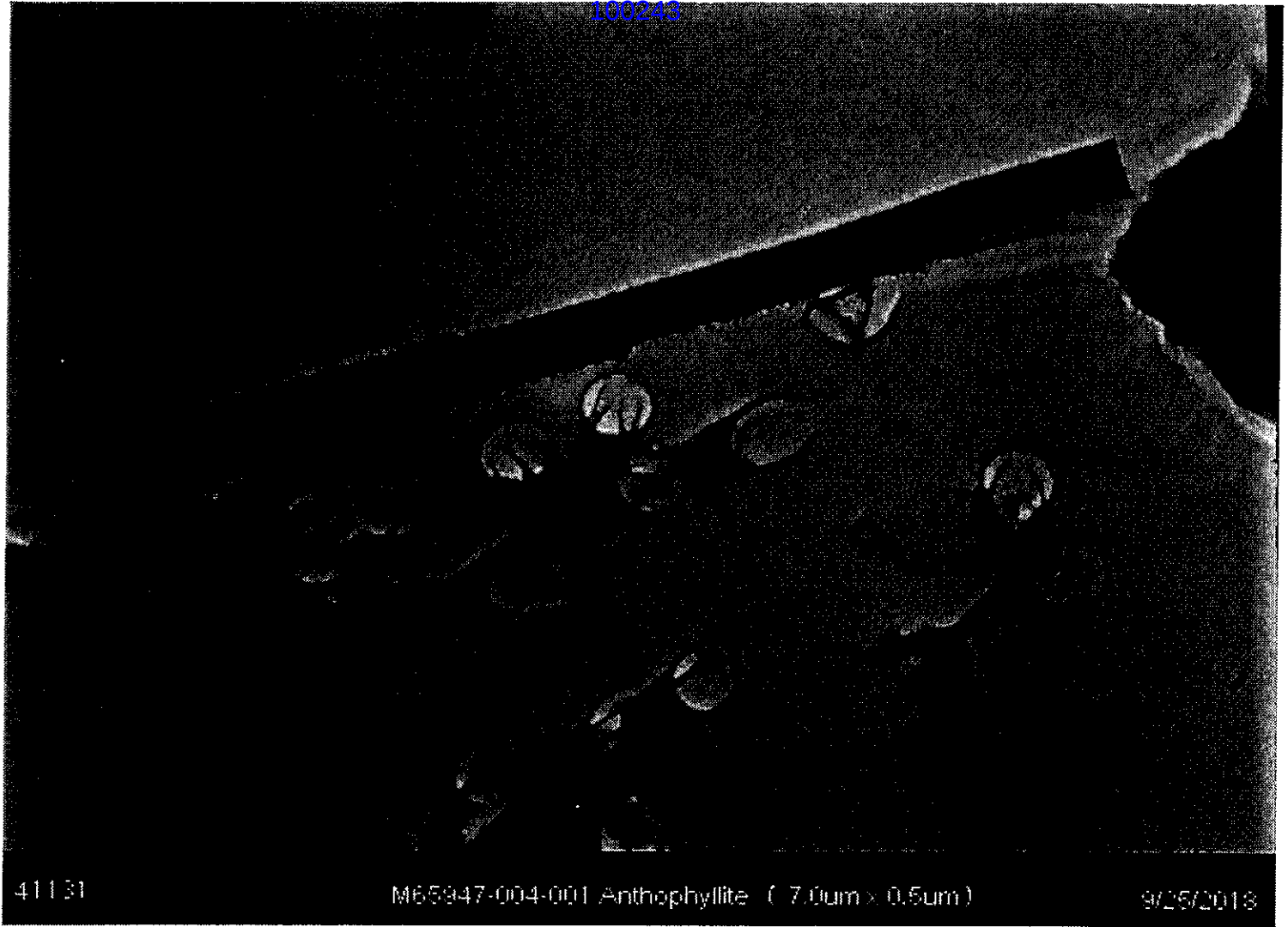




41130

M65947-004-001 Anthophyllite Diffraction @ 50cm

9/25/2018



41131

M65947-004-001 Anthophyllite ( 7.0um x 0.5um )

9/26/2018



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 3		Length	Width	G. O. Area	
Date of Analysis	7/16/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11026
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Fiber	Tremolite	8.1	1.44	5.6	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.62	0.24	27.6	X	X
3	A8-E5	Bundle	Tremolite	8.89	0.92	10.8	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.94	1.3	5.3	X	X
5	A8-E8	Bundle	Tremolite	15.56	1.42	11.0	X	X
6	A8-E9	Bundle	Tremolite	45.6	7.5	6.1	X	X
NSD	A8-F1							
NSD	A8-F10							
7	A8-F2	Fiber	Tremolite	8.82	1.47	6.0	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	19.68	1.45	13.6	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
NSD	A8-G5							
9	A8-G6	Bundle	Tremolite	5.34	1.02	5.2	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0
Percent of Org. Post Separation	0 (%)
Wt. Of Sample Analyzed	0.00002817 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	9 Str.
Structures per Gram of Sample	3.20E+05 Str./g

Detection Limit	3.55E+04 Str./g
Analytical Sensitivity	3.55E+04 Str./g

Reviewer /Date Digitally signed by MW Rigler, Ph.D.  
Date: 2018.09.06 14:29:53 -04'00'

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Jose Carrillo			Length	Width	G. O. Area
Date of Analysis	7/16/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

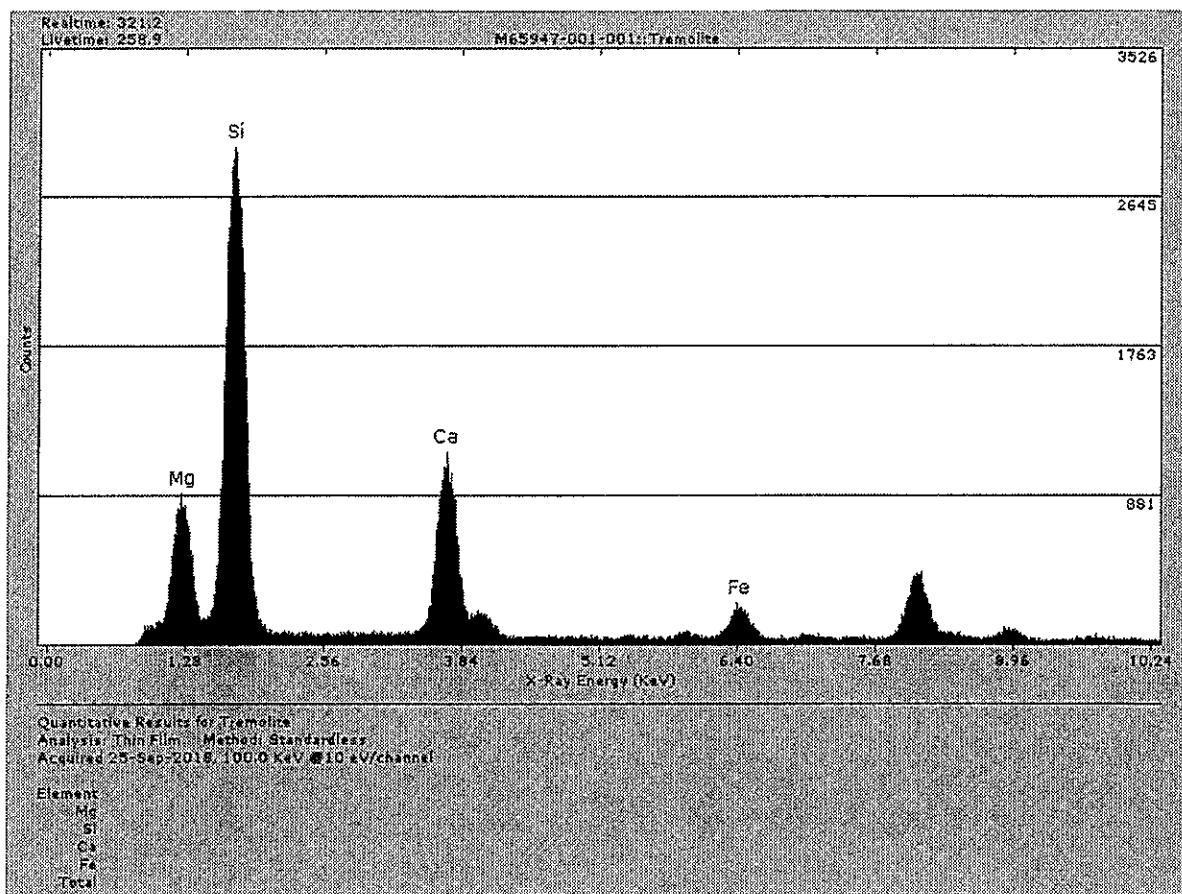
Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Fiber	Tremolite	8.1	1.44	5.6	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	6.62	0.24	27.6	X	X
3	A8-E5	Bundle	Tremolite	9.89	0.92	10.8	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.94	1.3	5.3	X	X
5	A8-E8	Bundle	Tremolite	15.56	1.42	11.0	X	X
6	A8-E9	Bundle	Tremolite	45.6	7.5	6.1	X	X
NSD	A8-F1							
NSD	A8-F10							
7	A8-F2	Fiber	Tremolite	8.82	1.47	6.0	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Bundle	Tremolite	19.88	1.45	13.6	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
NSD	A8-G4							
NSD	A8-G5							
9	A8-G6	Bundle	Tremolite	5.34	1.02	5.2	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0 g
Percent of Orig. Post Separation	0 (%)

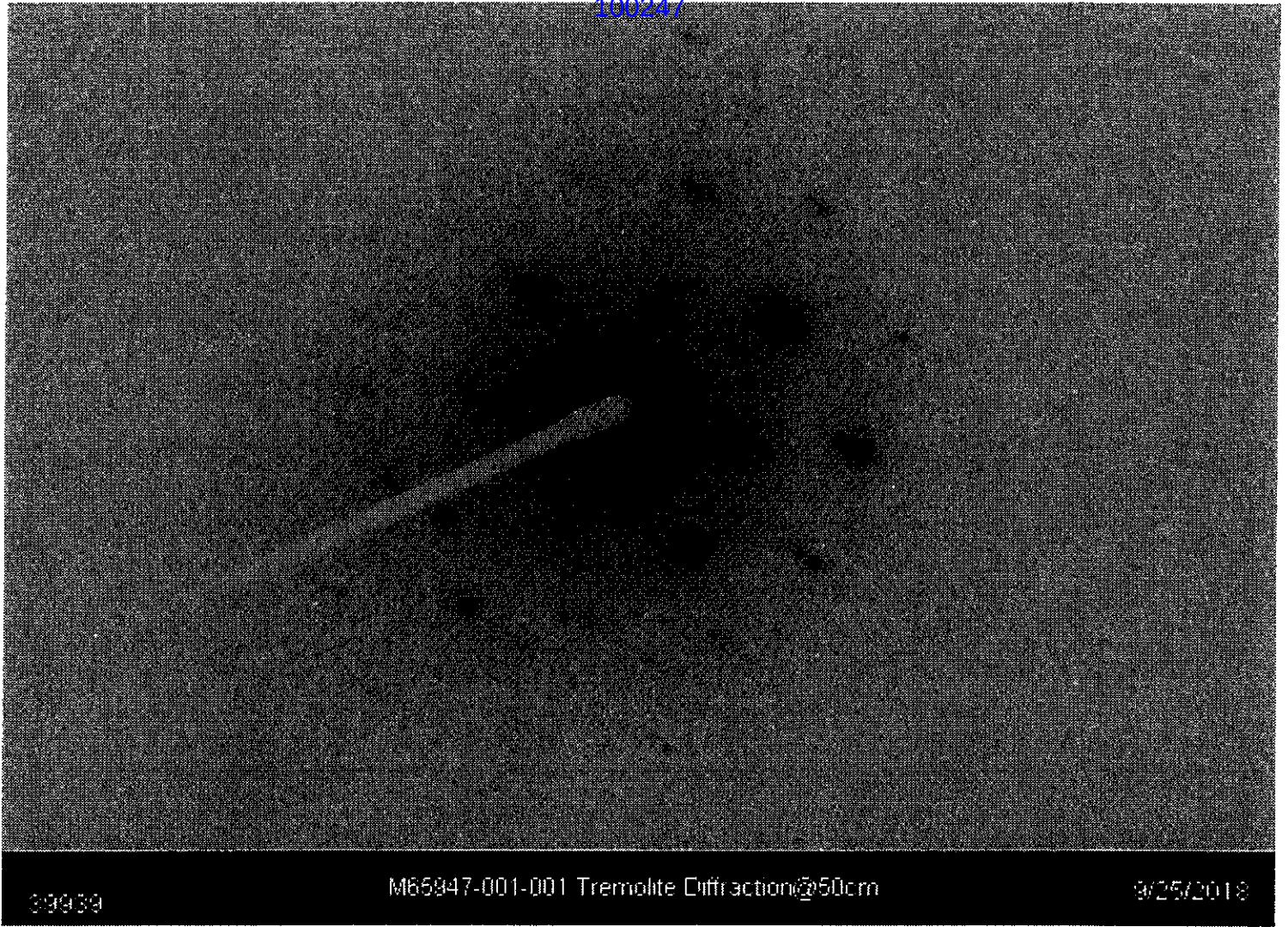
Wt. Of Sample Analyzed	0.00002817 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	9 Str.
Structures per Gram of Sample	3.20E+05 Str./g

Detection Limit	3.55E+04 Str./g
Analytical Sensitivity	3.55E+04 Str./g

Reviewer /Date \_\_\_\_\_





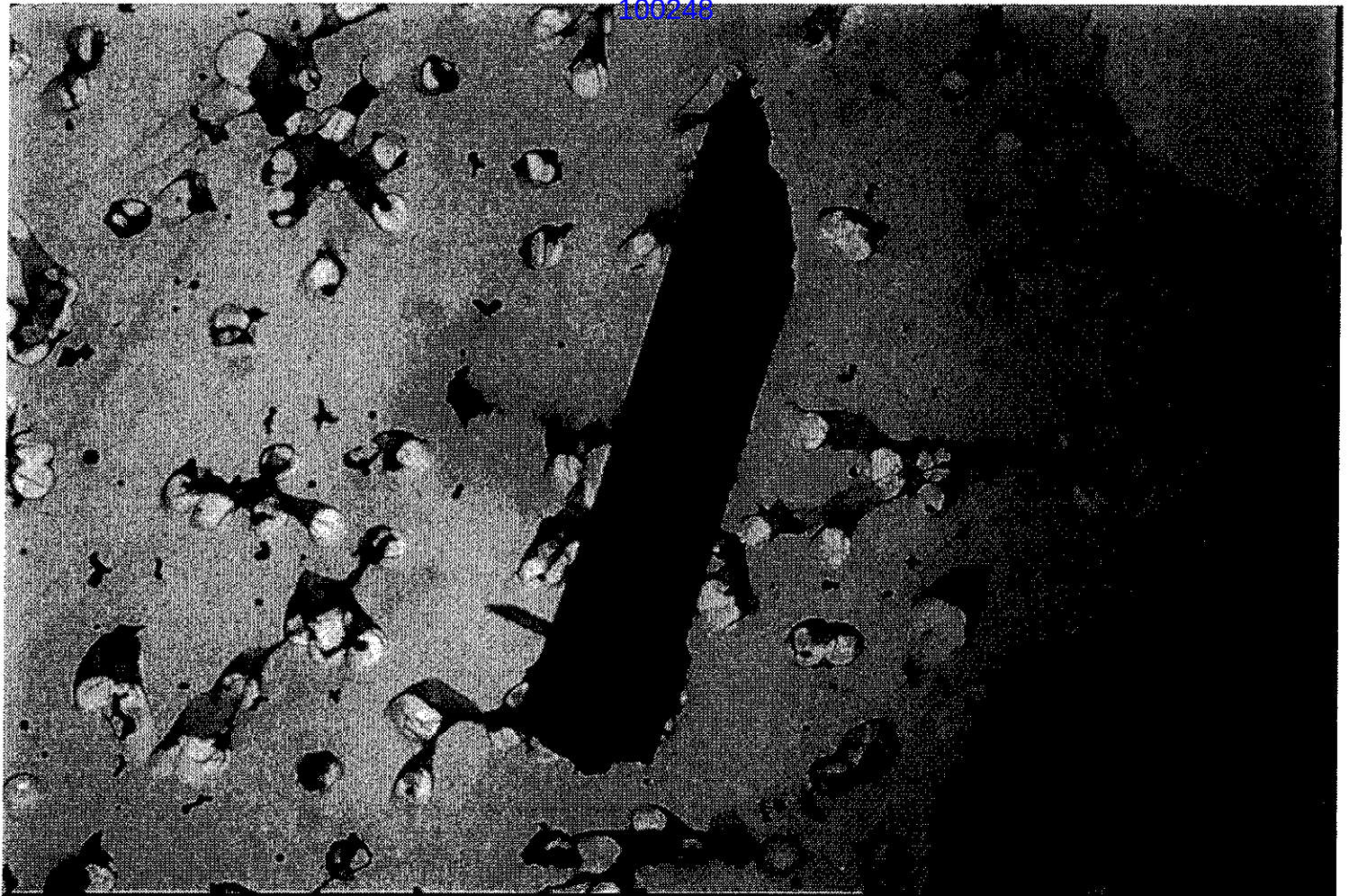


00000

M65947-001-001 Tremolite Diffraction @ 50cm

9/25/2018

100248



09940

M85947-001-001 Tremolite (8.1um x 1.44um)

9/25/2018

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 3		Length	Width	G. O. Area	
Date of Analysis	7/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm <sup>2</sup>			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	7.36	0.46	16.0	X	X
2	A4-A1	Bundle	Anthophyllite	33.12	1.84	18.0	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
NSD	A4-A4	Bundle	Anthophyllite	6.39	1.35	4.6	X	X
3	A4-A5	Bundle	Anthophyllite	57.5	2.76	20.8	X	X
4	A4-A6	Bundle	Anthophyllite	44.16	1.38	32.0	X	X
6	A4-A7	Bundle	Anthophyllite	46	4.14	11.1	X	X
NSD	A4-A8							
6	A4-A9	Bundle	Anthophyllite	30.3	5.06	6.0	X	X
7	A4-D10	Bundle	Anthophyllite	19.22	1.68	11.5	X	X
NSD	A4-D6							
8	A4-D7	Fiber	Anthophyllite	8.61	1.28	6.8	X	X
9	A4-D8	Bundle	Anthophyllite	8.4	0.92	9.1	X	X
10	A4-D8	Fiber	Anthophyllite	10.92	2.1	5.2	X	X
11	A4-D9	Fiber	Anthophyllite	5.87	1.01	5.8	X	X
12	A4-D9	Fiber	Anthophyllite	11.34	1.68	6.8	X	X
NSD	A4-E1							
13	A4-E10	Bundle	Anthophyllite	18.06	2.84	6.1	X	X
14	A4-E10	Fiber	Anthophyllite	17.01	0.34	50.0	X	X
15	A4-E2	Fiber	Anthophyllite	22.26	2.52	8.8	X	X
16	A4-E3	Fiber	Anthophyllite	6.93	0.67	10.3	X	X
NSD	A4-E4							
NSD	A4-E5							
17	A4-E6	Fiber	Anthophyllite	7.14	0.76	9.4	X	X
18	A4-E7	Bundle	Anthophyllite	49.14	2.94	16.7	X	X
NSD	A4-E8							
19	A4-E9	Fiber	Anthophyllite	3.99	0.59	6.8	X	X
20	A4-E9	Bundle	Anthophyllite	17.64	1.26	14.0	X	X

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0
Percent of Org. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.0004084
Filter size	201.1
Number of Structures Counted	20
Structures per Gram of Sample	4.90E+05

Detection Limit	2.45E+04
Analytical Sensitivity	2.45E+04

Digitally signed by MW Rigier, Ph.D.  
Reviewer /Date: 2018.09.06.14:30:48 -04'00'



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Jose Carrillo			Length	Width	G. O. Area
Date of Analysis	7/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

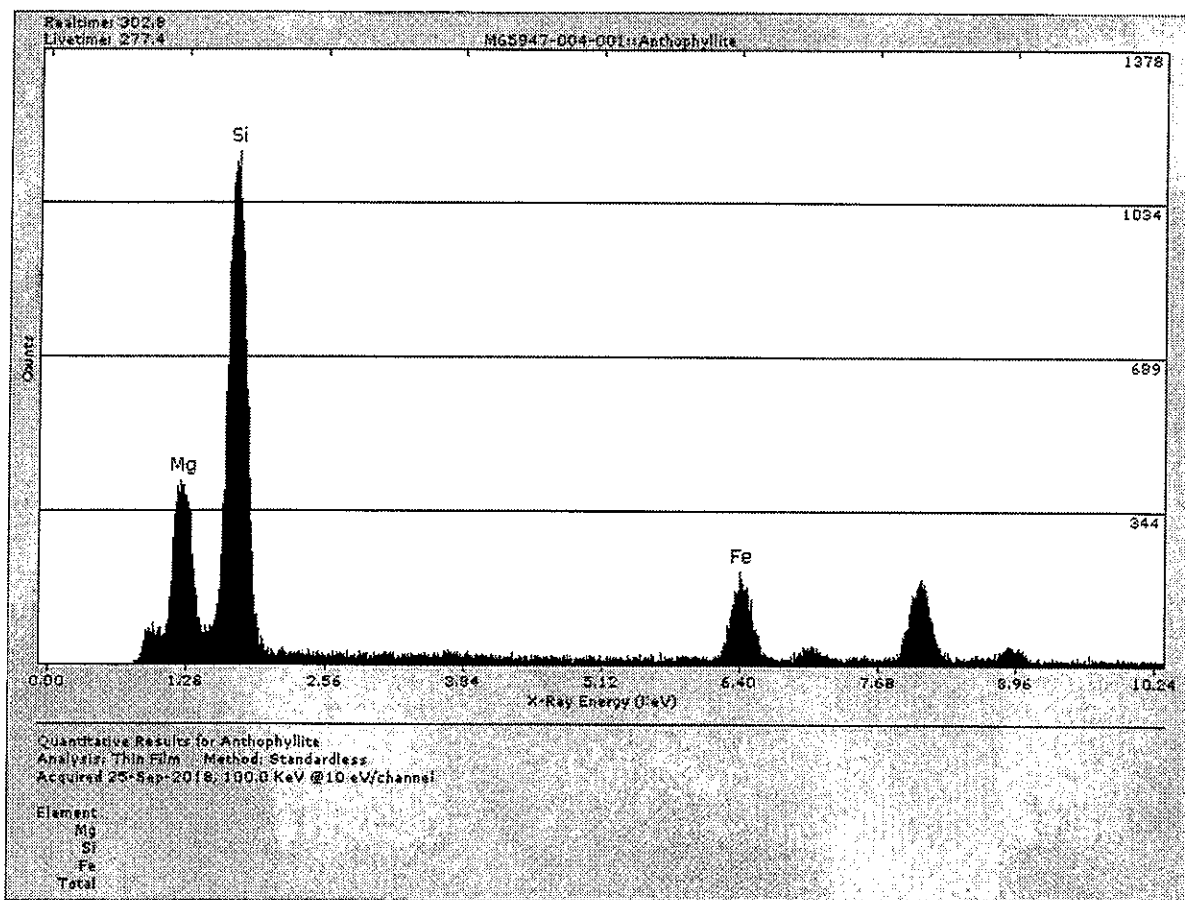
Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	7.36	0.46	16.0	X	X
2	A4-A1	Bundle	Anthophyllite	33.12	1.84	18.0	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
NSD	A4-A4	Bundle	Anthophyllite	6.39	1.38	4.6	X	X
3	A4-A5	Bundle	Anthophyllite	57.5	2.76	20.8	X	X
4	A4-A6	Bundle	Anthophyllite	44.16	1.38	32.0	X	X
5	A4-A7	Bundle	Anthophyllite	46	4.14	11.1	X	X
NSD	A4-A8							
6	A4-A9	Bundle	Anthophyllite	30.3	5.06	6.0	X	X
7	A4-D10	Bundle	Anthophyllite	19.32	1.68	11.5	X	X
NSD	A4-D6							
8	A4-D7	Fiber	Anthophyllite	8.61	1.26	6.8	X	X
9	A4-D8	Bundle	Anthophyllite	8.4	0.92	9.1	X	X
10	A4-D8	Fiber	Anthophyllite	10.92	2.1	5.2	X	X
11	A4-D9	Fiber	Anthophyllite	5.67	1.01	5.6	X	X
12	A4-D9	Fiber	Anthophyllite	11.34	1.68	6.8	X	X
NSD	A4-E1							
13	A4-E10	Bundle	Anthophyllite	18.06	2.94	6.1	X	X
14	A4-E10	Fiber	Anthophyllite	17.01	0.34	50.0	X	X
15	A4-E2	Fiber	Anthophyllite	22.26	2.52	8.8	X	X
16	A4-E3	Fiber	Anthophyllite	6.93	0.67	10.3	X	X
NSD	A4-E4							
NSD	A4-E5							
17	A4-E6	Fiber	Anthophyllite	7.14	0.76	9.4	X	X
18	A4-E7	Bundle	Anthophyllite	49.14	2.94	16.7	X	X
NSD	A4-E8							
19	A4-E9	Fiber	Anthophyllite	3.99	0.59	6.8	X	X
20	A4-E9	Bundle	Anthophyllite	17.64	1.26	14.0	X	X

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0 g
Percent of Orig. Post Separation	0 (%)

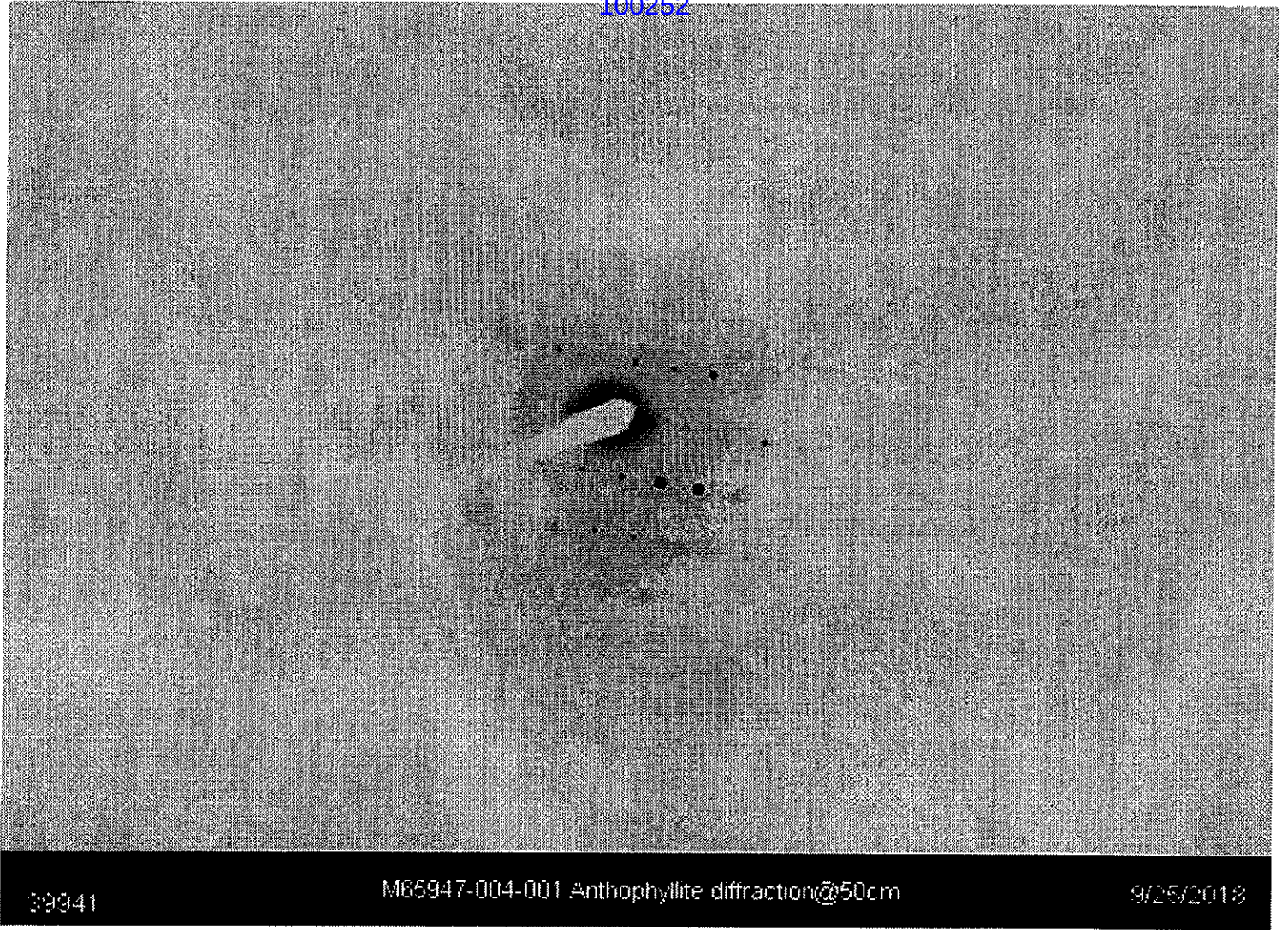
Wt. Of Sample Analyzed	0.0004084 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	20 Str.
Structures per Gram of Sample	4.90E+05 Str./g

Detection Limit	2.45E+04 Str./g
Analytical Sensitivity	2.45E+04 Str./g

Reviewer /Date \_\_\_\_\_







39941

M65947-004-001 Anthophyllite diffraction@50cm

9/25/2018



09942

M65947-004-001 Anthophyllite (7.36um x 0.46um)

9/25/2018



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Analyst 4			Length	Width	G. O. Area
Date of Analysis	7/11/2018 - 7/12/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scoop No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.278

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Bundle	Tremolite	8.8	1.3	6.8	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	5.9	0.2	29.5	X	X
3	A8-E5	Fiber	Tremolite	10.1	0.84	12.0	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.8	0.84	8.1	X	X
5	A8-E8	Fiber	Tremolite	13.8	0.9	15.3	X	X
6	A8-E9	Fiber	Tremolite	39.5	6.4	6.2		
NSD	A8-F1							
NSD	A8-F10							
7	A8-F2	Bundle	Tremolite	8.2	1.4	5.9	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Fiber	Tremolite	18.6	1.1	16.9	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
9	A8-G4	Fiber	Tremolite	4.5	0.8	5.6	X	X
NSD	A8-G5							
10	A8-G6	Bundle	Tremolite	4.6	0.8	5.8	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0
Percent of Orig. Post Separation	0 (%)
Wt. Of Sample Analyzed	0.00002817 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	10 Str.
Structures per Gram of Sample	3.55E+05 Str./g

Detection Limit	3.55E+04 Str./g
Analytical Sensitivity	3.55E+04 Str./g

Digitally signed by MW Rigler, Ph.D.  
Reviewer / Date Date: 2018.09.06 14:32:08 -04'00'

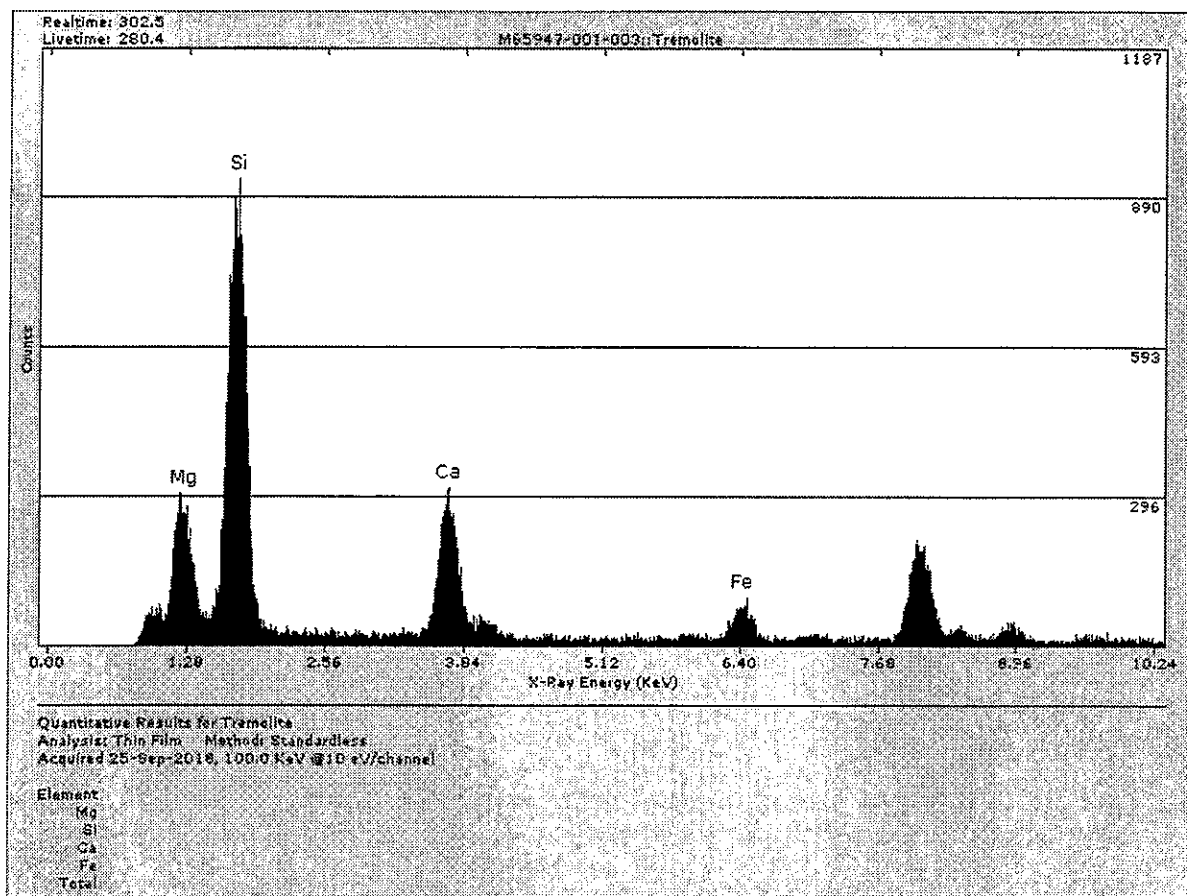
TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-001 0.3% Tremolite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	7/11/2018 - 7/12/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02055			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm <sup>2</sup>			0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A8-E1							
NSD	A8-E10							
1	A8-E2	Bundle	Tremolite	8.8	1.3	6.8	X	X
NSD	A8-E3							
2	A8-E4	Fiber	Tremolite	5.9	0.2	29.5	X	X
3	A8-E5	Fiber	Tremolite	10.1	0.84	12.0	X	X
NSD	A8-E6							
4	A8-E7	Fiber	Tremolite	6.8	0.84	8.1	X	X
5	A8-E8	Fiber	Tremolite	13.8	0.9	15.3	X	X
6	A8-E9	Fiber	Tremolite	39.5	6.4	6.2		
NSD	A8-F1							
NSD	A8-F10							
7	A8-F2	Bundle	Tremolite	8.2	1.4	5.9	X	X
NSD	A8-F3							
NSD	A8-F4							
NSD	A8-F5							
8	A8-G1	Fiber	Tremolite	18.6	1.1	16.9	X	X
NSD	A8-G10							
NSD	A8-G2							
NSD	A8-G3							
9	A8-G4	Fiber	Tremolite	4.5	0.8	5.6	X	X
NSD	A8-G5							
10	A8-G6	Bundle	Tremolite	4.6	0.8	5.8	X	X
NSD	A8-G7							
NSD	A8-G8							
NSD	A8-G9							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02055	0 g
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00002817 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	10 Str.
Structures per Gram of Sample	3.55E+05 Str./g

Detection Limit	3.55E+04 Str./g
Analytical Sensitivity	3.55E+04 Str./g



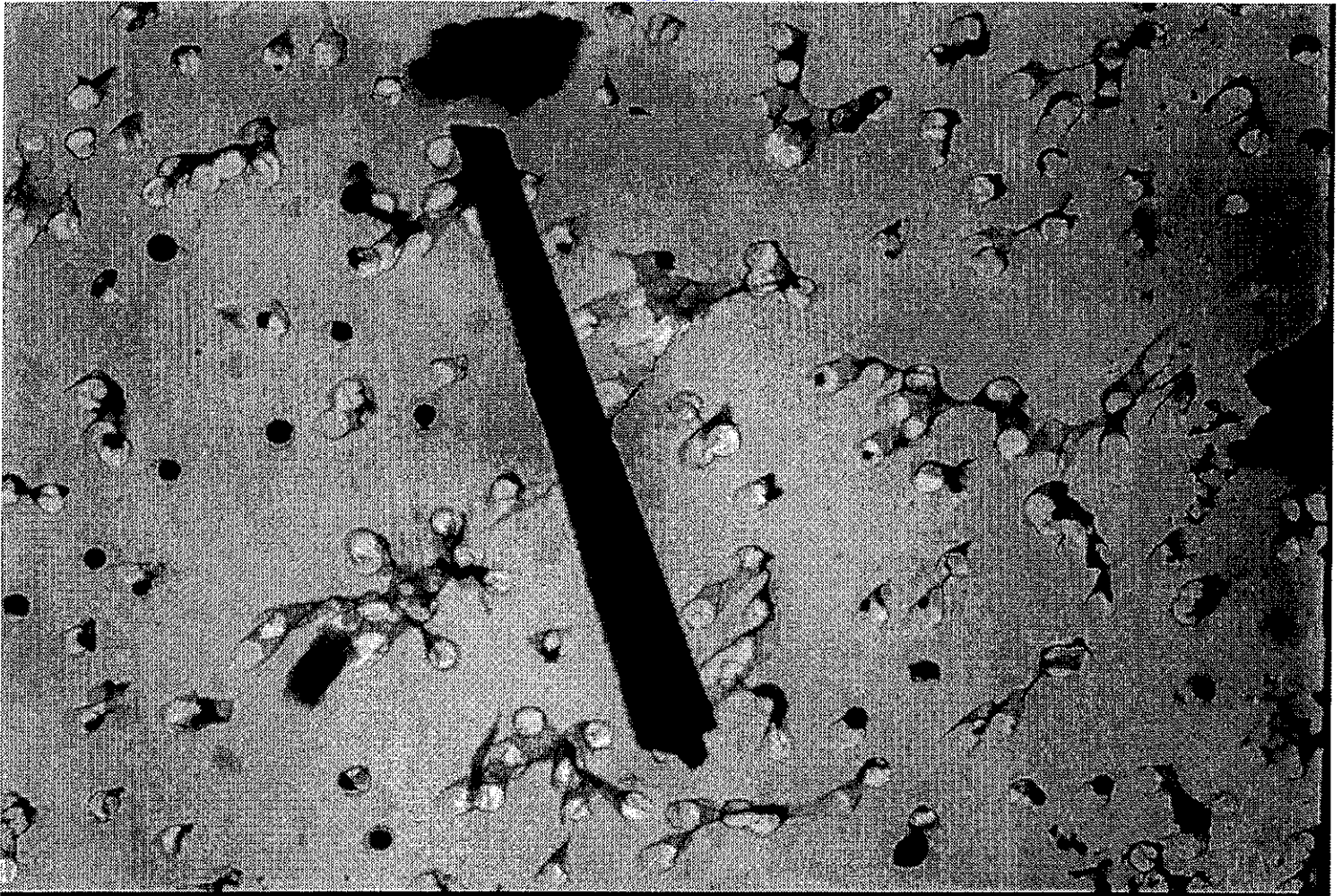




39935

M65947-001-003 Tremolite Diffraction @ 50cm

9/25/2018



39936

M65947-001-003 Tremolite ( 10.1 um x 0.84 um )

9/25/2018



TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted
Analyst:	Analyst 4			Length	Width
Date of Analysis	7/23/2018 - 7/25/2018		G. O. in microns =	105	105
Initial Weight(g)	0.02980			106	105
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm²		0.276

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	6.4	0.38	16.8	X	X
2	A4-A1	Bundle	Anthophyllite	31.5	2.2	14.3	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
3	A4-A4	Bundle	Anthophyllite	5.5	1.2	4.6	X	X
4	A4-A5	Bundle	Anthophyllite	55.5	2.4	23.1	X	X
5	A4-A6	Bundle	Anthophyllite	43.6	1.2	36.3	X	X
6	A4-A7	Bundle	Anthophyllite	43.2	3.6	12.0	X	X
NSD	A4-A8							
7	A4-A9	Bundle	Anthophyllite	27.5	4.4	6.3	X	X
8	A4-D10	Bundle	Anthophyllite	16.9	1.7	11.1	X	X
NSD	A4-D6							
9	A4-D7	Bundle	Anthophyllite	8.3	1.2	6.9	X	X
10	A4-D8	Bundle	Anthophyllite	9.3	1.1	8.5	X	X
11	A4-D8	Bundle	Anthophyllite	11.1	1.8	6.2	X	X
12	A4-D9	Bundle	Anthophyllite	6.3	0.82	7.7	X	X
13	A4-D9	Fiber	Anthophyllite	10.1	1.5	6.7	X	X
NSD	A4-E1							
14	A4-E10	Fiber	Anthophyllite	4.2	0.24	17.5	X	X
15	A4-E10	Bundle	Anthophyllite	19.3	0.84	23.0	X	X
16	A4-E2	Fiber	Anthophyllite	22.3	2.1	10.6	X	X
17	A4-E3	Fiber	Anthophyllite	6.3	0.66	9.3	X	X
NSD	A4-E4							
NSD	A4-E5							
18	A4-E6	Fiber	Anthophyllite	7.8	0.7	11.1	X	X
19	A4-E7	Bundle	Anthophyllite	50.2	3.1	16.2	X	X
NSD	A4-E8							
20	A4-E9	Bundle	Anthophyllite	10.4	1.2	8.7	X	X
21	A4-E9	Bundle	Anthophyllite	21.3	1.2	17.8	X	X
22	A4-E9	Fiber	Anthophyllite	3.7	0.5	7.4	X	X

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0
Percent of Orig. Post Separation	0 (%)
Wt. Of Sample Analyzed	0.00004084 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	22 Str.
Structures per Gram of Sample	5.39E+05 Str./g

Detection Limit	2.45E+04 Str./g
Analytical Sensitivity	2.45E+04 Str./g

Digitally signed by MW Rigler, Ph.D.  
Reviewer Date: 2018.09.08 14:31:03 -04'00'

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M65947-004 0.3% Anthophyllite in Talc		Grid Box #	8617	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	7/23/2018 - 7/25/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02980			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	25%	G.O.s Counted	25
3	Screen Magnification	20 KX	Area Examined mm²			0.276

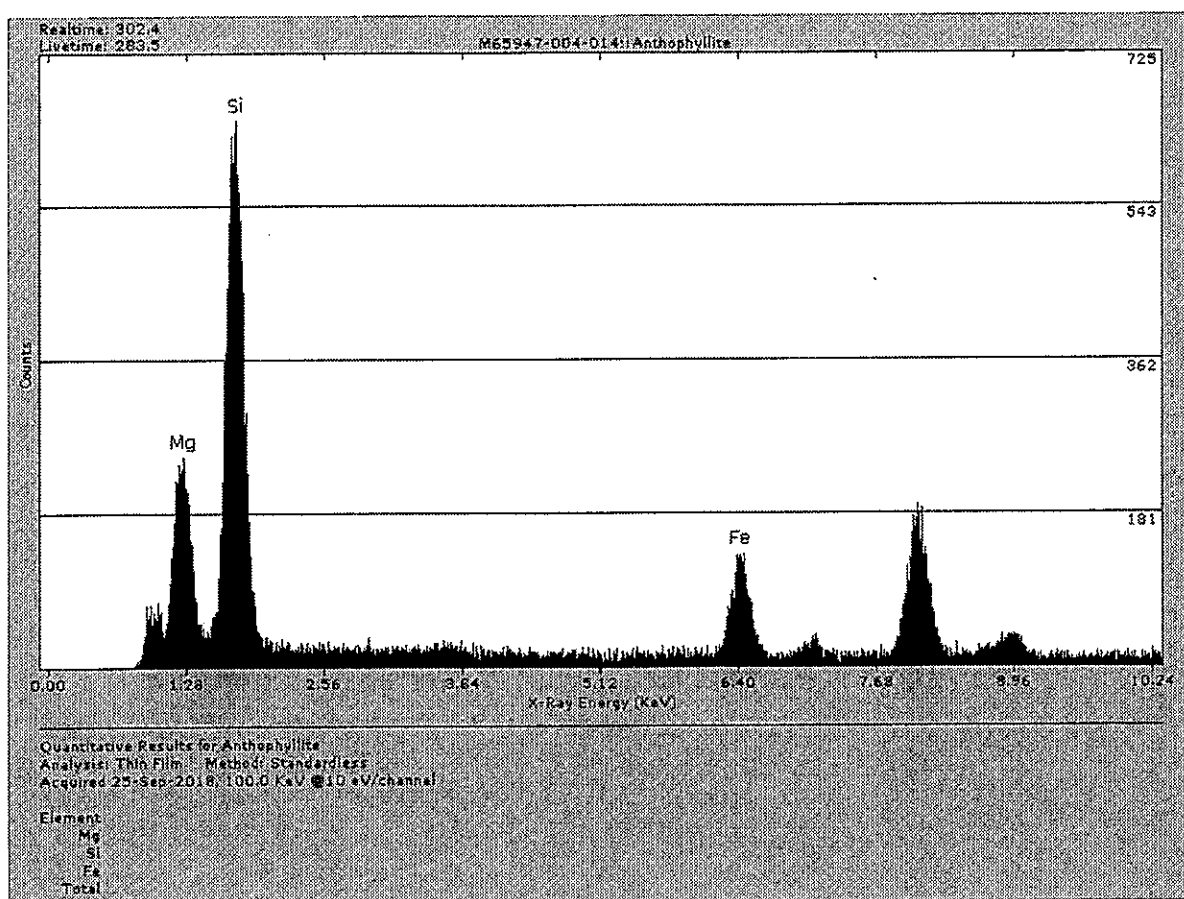
Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
1	A4-A1	Fiber	Anthophyllite	6.4	0.38	16.8	X	X
2	A4-A1	Bundle	Anthophyllite	31.5	2.2	14.3	X	X
NSD	A4-A10							
NSD	A4-A2							
NSD	A4-A3							
3	A4-A4	Bundle	Anthophyllite	5.5	1.2	4.6	X	X
4	A4-A5	Bundle	Anthophyllite	55.5	2.4	23.1	X	X
5	A4-A6	Bundle	Anthophyllite	43.6	1.2	36.3	X	X
6	A4-A7	Bundle	Anthophyllite	43.2	3.6	12.0	X	X
NSD	A4-A8							
7	A4-A9	Bundle	Anthophyllite	27.5	4.4	6.3	X	X
8	A4-D10	Bundle	Anthophyllite	18.9	1.7	11.1	X	X
NSD	A4-D6							
9	A4-D7	Bundle	Anthophyllite	8.3	1.2	6.9	X	X
10	A4-D8	Bundle	Anthophyllite	9.3	1.1	8.5	X	X
11	A4-D8	Bundle	Anthophyllite	11.1	1.8	6.2	X	X
12	A4-D9	Bundle	Anthophyllite	6.3	0.82	7.7	X	X
13	A4-D9	Fiber	Anthophyllite	10.1	1.5	6.7	X	X
NSD	A4-E1							
14	A4-E10	Fiber	Anthophyllite	4.2	0.24	17.5	X	X
15	A4-E10	Bundle	Anthophyllite	19.3	0.84	23.0	X	X
16	A4-E2	Fiber	Anthophyllite	22.3	2.1	10.6	X	X
17	A4-E3	Fiber	Anthophyllite	6.3	0.68	9.3	X	X
NSD	A4-E4							
NSD	A4-E5							
18	A4-E6	Fiber	Anthophyllite	7.8	0.7	11.1	X	X
19	A4-E7	Bundle	Anthophyllite	50.2	3.1	16.2	X	X
NSD	A4-E8							
20	A4-E9	Bundle	Anthophyllite	10.4	1.2	8.7	X	X
21	A4-E9	Bundle	Anthophyllite	21.3	1.2	17.8	X	X
22	A4-E9	Fiber	Anthophyllite	3.7	0.5	7.4	X	X

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02980	0 g
Percent of Orig. Post Separation	0 (%)

Wt. Of Sample Analyzed	0.00004084 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	22 Str.
Structures per Gram of Sample	5.39E+05 Str./g

Detection Limit	2.45E+04 Str./g
Analytical Sensitivity	2.45E+04 Str./g

Reviewer Date \_\_\_\_\_







39937

M65947-004-014 Anthophyllite Diffraction @ 50cm

9/25/2018



# Exhibit 24

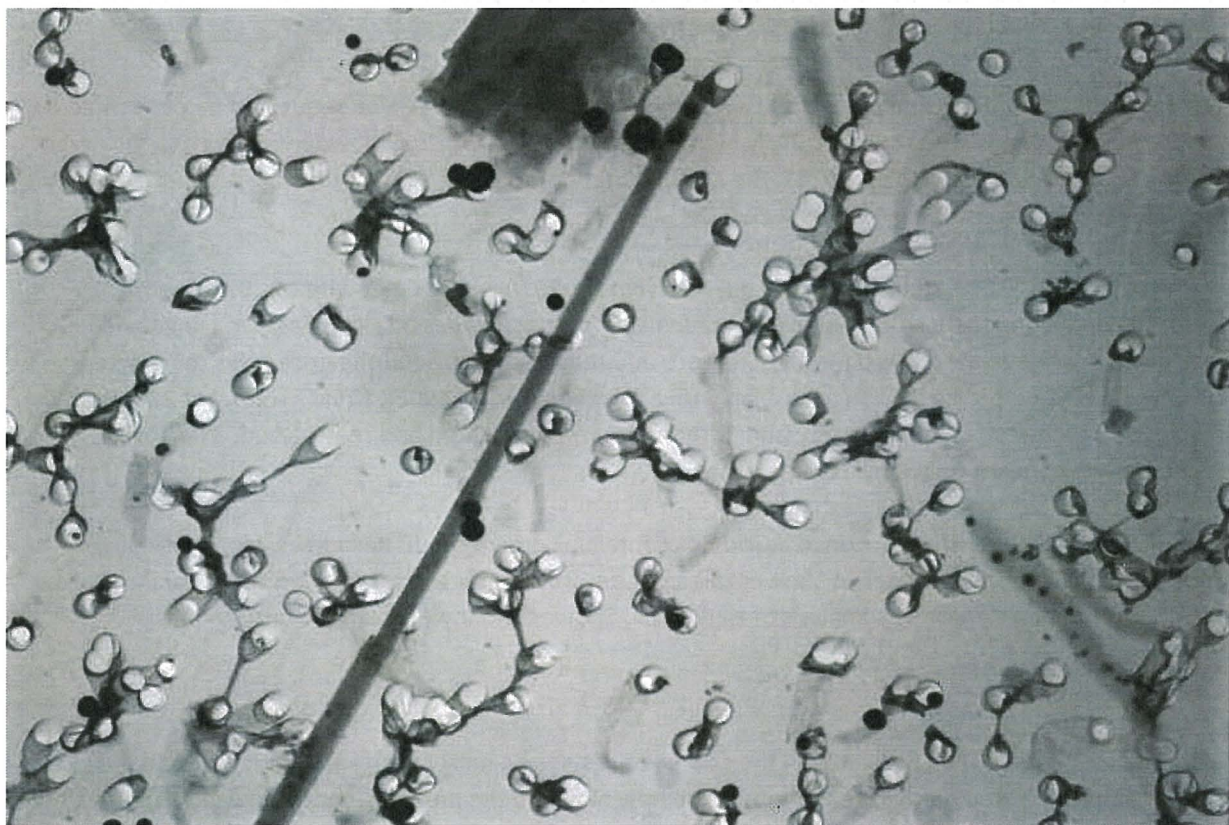




6110 W. 34th Street  
Houston, TX 77092

(713) 290-0221  
www.j3resources.com

## **Verified Analysis of 22 Asbestos Structures Identified by MAS in Six Historical Johnson's Baby Powder Samples (M69042)**



**Lee W. Poye**

**J3 Resources, Inc.**

**November 7, 2018**





November 7, 2018

Joseph D. Satterley, Esq.  
Kazan McClain Satterley & Greenwood  
55 Harrison St. Suite 400  
Oakland, CA 94607

RE: Verified Asbestos Analysis of *Johnson's Baby Powder* Samples

Dear Mr. Satterley,

Enclosed please find the findings of the Verified Asbestos Analysis (VAA) you requested be performed on twenty-two asbestos structures originally identified in six *Johnson's Baby Powder* talc samples analyzed by MAS, LLC and dated October 2018. The MAS, LLC report detailing all their findings is titled "*Analysis of Historical Johnson's Baby Powder M69042*".

I arrived at MAS, LLC at 8:00 am Wednesday, October 31, 2018 where I met with Mr. Bill Longo, PhD prior to conducting the VAA on his analysis of *Johnson's Baby Powder* talc samples. Dr. Longo and I reviewed the above-mentioned MAS, LLC report, and then I was provided the grids I was to analyze. Finally, I was escorted by Dr. Longo to a lab with a functional JEOL 1200EX ATEM. A total of 22 reported asbestos structures (21 anthophyllite and 1 tremolite) were relocated and re-analyzed. The entire exercise was completed in approximately 4 hours.

In addition, I also provided Dr. Longo a Grid Box containing grids from J3 Resources, Inc.'s previously prepared and analyzed Shower to Shower talc samples. This grid box was provided to Dr. Longo to allow MAS to conduct a VAA on J3's analysis of sixteen J&J Shower to Shower cosmetic talc samples.

#### Summary of Results

All 22 particles were readily located in the grid openings as originally reported. Additionally, the dimensions measured during the VAA approximately matched the measurements originally reported. While there was 100% agreement the 22 asbestos structures reported were anthophyllite and tremolite, I judged 2 of the 22 structures did not meet the strict definition of a regulated asbestos fiber (parallel sides). I was able to complete my VAA. Overall, this VAA yielded a >90% validation rate. The table below documents the findings of this VAA. Appendix A contains the raw data from both the original report and details any time my assessment differed from the original determination.





**Summary of Verified Analysis of 22 Asbestos Structures Detected in Six  
Historical Johnson's Baby Powder Originally Analyzed by MAS, LLC**

SAMPLE #	STR #	GO	DIMENSION (µM)	STR. TYPE	ID	VERIFIED
<b>M69042-001</b>	1	B8	14 x 0.4	B/Grid Bar	Anth	Yes
	2	D10	2 x 0.4	B	Anth	Yes
	3	A2	15.5 x 2.0	B	Anth	Yes
	4	C6	10 x 0.25	F	Anth	Yes
	5	C10	22 x 2.5	Cleav Frag/Trans	Anth/Talc	No
<b>M69042-002</b>	1	B8	35 x 1.5	B	Anth	Yes
	2	B8	12 x 1.0	B	Anth	Yes
	3	E1	6 x 1.0	F	Anth	Yes
	4	E9	5.5 x 0.6	B	Anth	Yes
	5	H7	32 x 0.9	B	Anth	Yes
	6	C1	10 x 1.1	B	Anth	Yes
	7	G3	10.5 x 1.0	B	Anth	Yes
<b>M69042-003</b>	1	A8	4.5 x 0.4	Cleav Frag	Trem	No
	2	F3	3.2 x 0.4	B	Anth	Yes
<b>M69042-004</b>	1	A8	14 x 0.4	B	Anth	Yes
	2	F1	4 x 0.35	B	Anth	Yes
	3	E3	13 x 0.5	B	Anth	Yes
<b>M69042-008</b>	1	C2	4 x 0.5	B	Anth	Yes
	2	B1	8 x 1.5	B	Anth	Yes
	3	C6	5 x 0.5	B	Anth	Yes
<b>M69042-010</b>	1	F5	9 x 1.5	B	Anth	Yes
	2	A9	8.5 x 0.5	B	Anth	Yes

Thank you very much for the opportunity to work on this project. I am available to answer any questions regarding the findings of my VAA and can be reached at 713-290-0221.

Sincerely,

Lee W. Poye  
VP- J3 Resources, Inc.



# APPENDIX

## A

**Grid Square ID:**

Total No. of Structures:	5
True Positives:	4
False Positives:	1
False Negatives:	

M:\Main Company Data Store\K\SYS\QA\QAQC\ITEM QC Templates\Verified Anlaysis Count Sheet 10-23-14.pdf

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M69042-001		Grid Box #	8637	No. of Grids Counted
Analyst:	Mehrdad Motamedi		Length		2
Date of Analysis	10/25/2018-10/26/2018			Width	G. O. Area
Initial Weight(g)	0.04077		G. O. in microns =	105	105
Analysis Type	Post Separation Talc Analysis			105	105
Scope No.	Accelerating Voltage	100 KV	Grid Acceptance	Yes	Average
	Screen Magnification	20 KX	Loading%	20%	G.O.s Counted
4			Area Examined mm <sup>2</sup>		1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A2-A1							
NSD	A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
NSD	A9							
NSD	A10							
NSD	B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
1	B8	Fiber	Anthophyllite	14.4	0.4	36.0	X	X
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
2	D10	Fiber	Anthophyllite	2.3	0.4	5.8	X	X
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-001		Grid Box #	8637	No. of Grids Counted	2
Analyst:	Mehrdad Motamedl			Length	Width	G. O. Area
Date of Analysis	10/25/2018-10/26/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.04077			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted	100
4	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A3-A1							
3	A2	Bundle	Anthophyllite	15.7	2	7.9	X	X
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
NSD	A9							
NSD	A10							
NSD	B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
4	C6	Fiber	Anthophyllite	10	0.2	50.0	X	X
NSD	C7							
NSD	C8							
NSD	C9							
5	C10	Bundle	Anthophyllite	22.5	2.5	9.0	X	X
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-001		Grid Box #	8637	No. of Grids Counted	2
Analyst:	Mehrdad Motamedl			Length	Width	G. O. Area
Date of Analysis	10/25/2018-10/26/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.04077			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted	100
4	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
--------	--------------	-----------	------------------	--------	-------	-------	------	-----

	Sample Wt.
Org. Sample Wt.	Post HL Separation
0.04077	0.04077 g
Percent of Orig. Post Separation	100 (%)

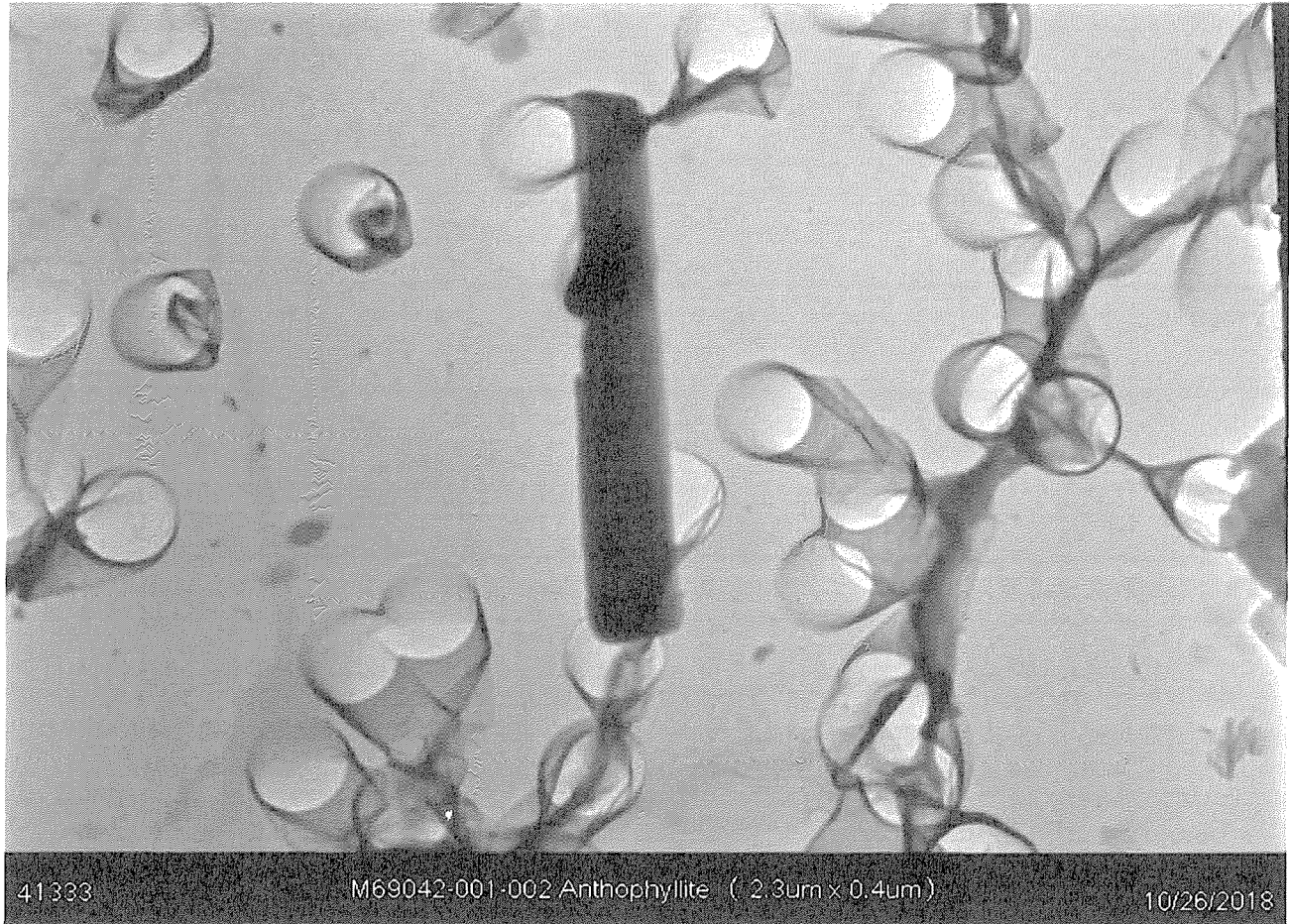
Wt. Of Sample Analyzed	0.00022352 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	5 Str.
Structures per Gram of Sample	2.24E+04 Str./g

Detection Limit	4.47E+03 Str./g
Analytical Sensitivity	4.47E+03 Str./g



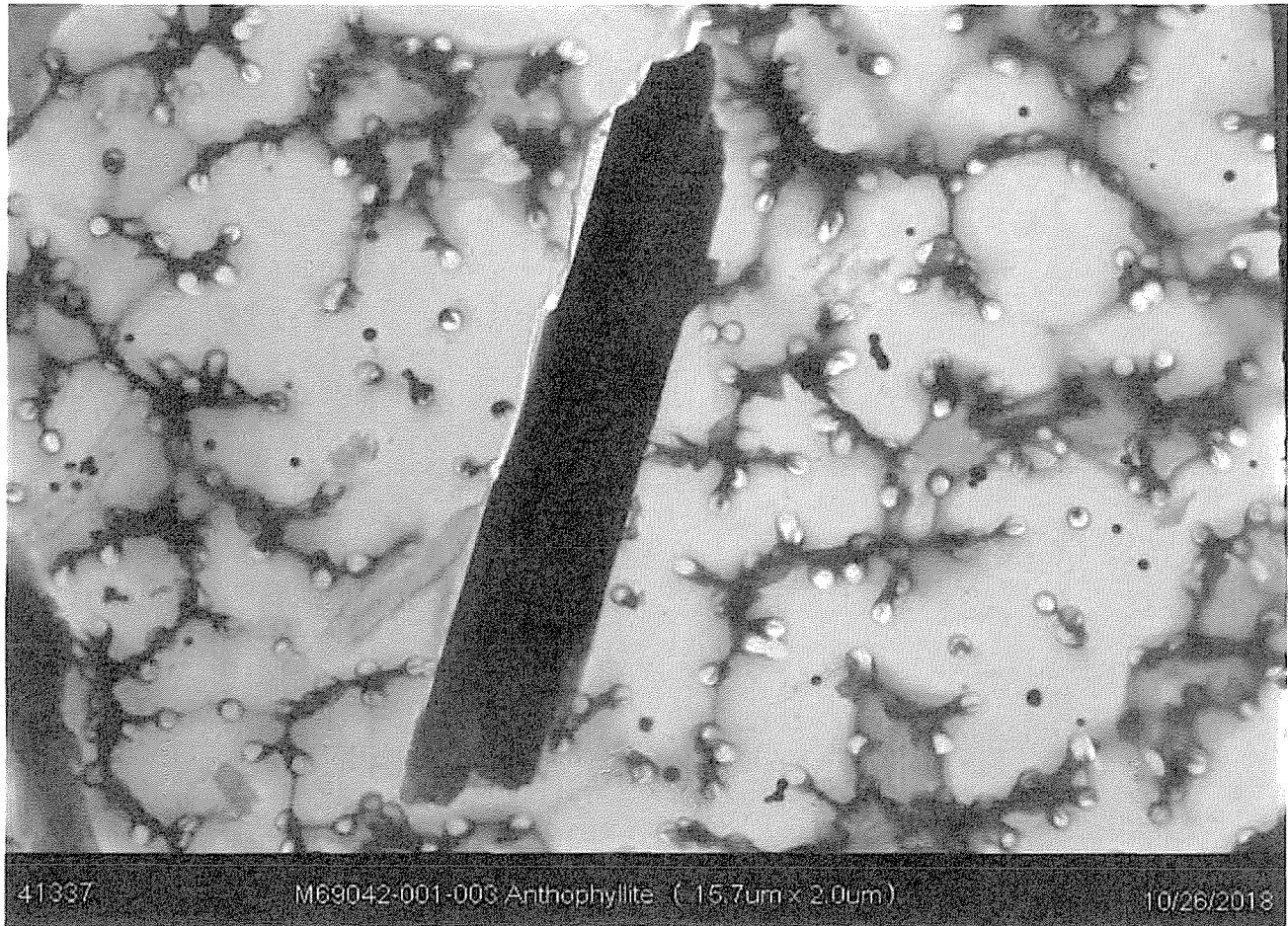
**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**





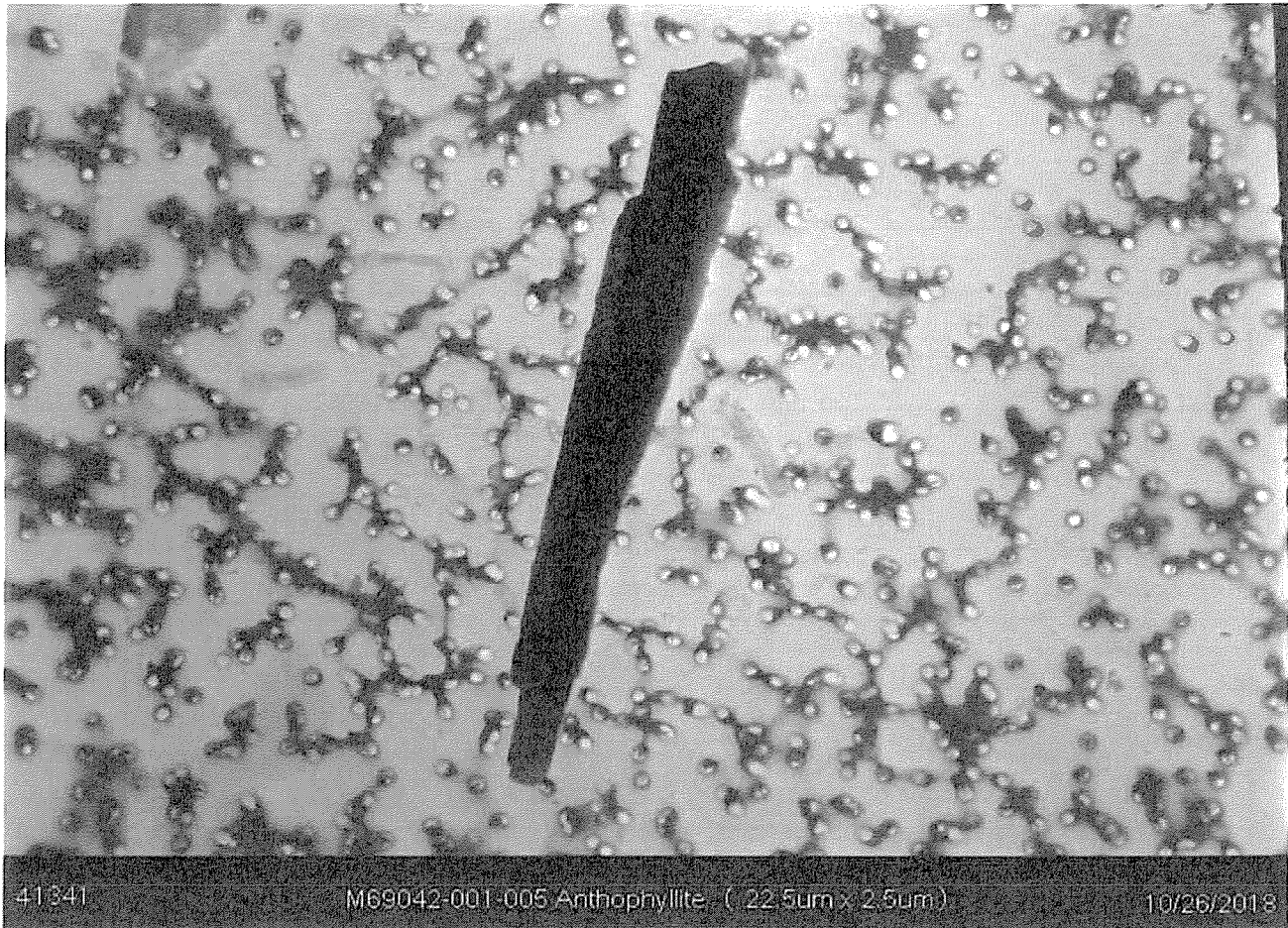
**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis? - NO**  
**Cleavage Fragment/Transitional**



### Verified Analysis Count Sheet

Date: 31-Oct-2018  
Analyst: LW Poye

SampleID: M69042-002  
Grid Square ID: \_\_\_\_\_

Structure No.	Length(μm)	Width(μm)	Type(F,B,C)	Sketch	ID	Verified(Y/N)
1/B8	35	1.5	B		Antho	Y
2/B8	12	1.0	B		Antho	Y
3/E1	6	1.0	F		Antho	Y
4/E9	5.5	0.6	B		Antho	Y
5/H7	32	0.9	B		Antho	Y
6/C1	10	1.1	B		Antho	Y
7/G3	10.5	1.0	B		Antho	Y

Total No. of Structures:	<u>7</u>
True Positives:	<u>7</u>
False Positives:	<u>0</u>
False Negatives:	<u> </u>

PG. 1 of 1



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-002		Grid Box #	8621	No. of Grids Counted	2
Analyst:	Anthony Keeton			Length	Width	G. O. Area
Date of Analysis	9/26/2018 - 9/28/2018 &10/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02000			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	12%	G.O.s Counted	100
2	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	B2-B6							
NSD	B7							
1	B8	Bundle	Anthophyllite	35.4	1.8	19.7	X	X
2		Bundle	Anthophyllite	12.4	1.1	11.3	X	X
NSD	B9							
NSD	B10							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
3	E1	Bundle	Anthophyllite	6.4	1.1	5.8	X	X
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
4	E9	Bundle	Anthophyllite	6	0.7	8.6	X	X
NSD	E10							
NSD	F1							
NSD	F2							
NSD	F3							
NSD	F4							
NSD	F5							
NSD	F6							
NSD	F7							
NSD	F8							
NSD	F9							
NSD	F10							
NSD	G1							
NSD	G2							
NSD	G3							
NSD	G4							
NSD	G5							
NSD	G6							
NSD	G7							
NSD	G8							
NSD	G9							
NSD	G10							
NSD	H3							
NSD	H4							
NSD	H5							
NSD	H6							
5	H7	Bundle	Anthophyllite	34.5	1.1	31.4	X	X
NSD	H8							

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-002		Grid Box #	8621	No. of Grids Counted	2
Analyst:	Anthony Keeton			Length	Width	G. O. Area
Date of Analysis	9/26/2018 - 9/28/2018 &10/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02000			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	12%	G.O.s Counted	100
2	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	H9							
NSD	B3-B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B10							
6	C1	Bundle	Anthophyllite	11.5	1.2	9.6	X	X
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	G1							
NSD	G2							
7	G3	Bundle	Anthophyllite	11.5	1	11.5	X	X
NSD	G4							
NSD	G5							
NSD	G6							
NSD	G7							
NSD	G8							
NSD	G9							
NSD	G10							
NSD	H1							
NSD	H2							
NSD	H3							
NSD	H4							
NSD	H5							
NSD	H6							
NSD	H7							
NSD	H8							
NSD	H9							
NSD	H10							

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-002		Grid Box #	8621	No. of Grids Counted	2
Analyst:	Anthony Keeton			Length	Width	G. O. Area
Date of Analysis	9/26/2018 - 9/28/2018 &10/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02000			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	12%	G.O.s Counted	100
2	Screen Magnification	20 KX	Area Examined mm²			1.103

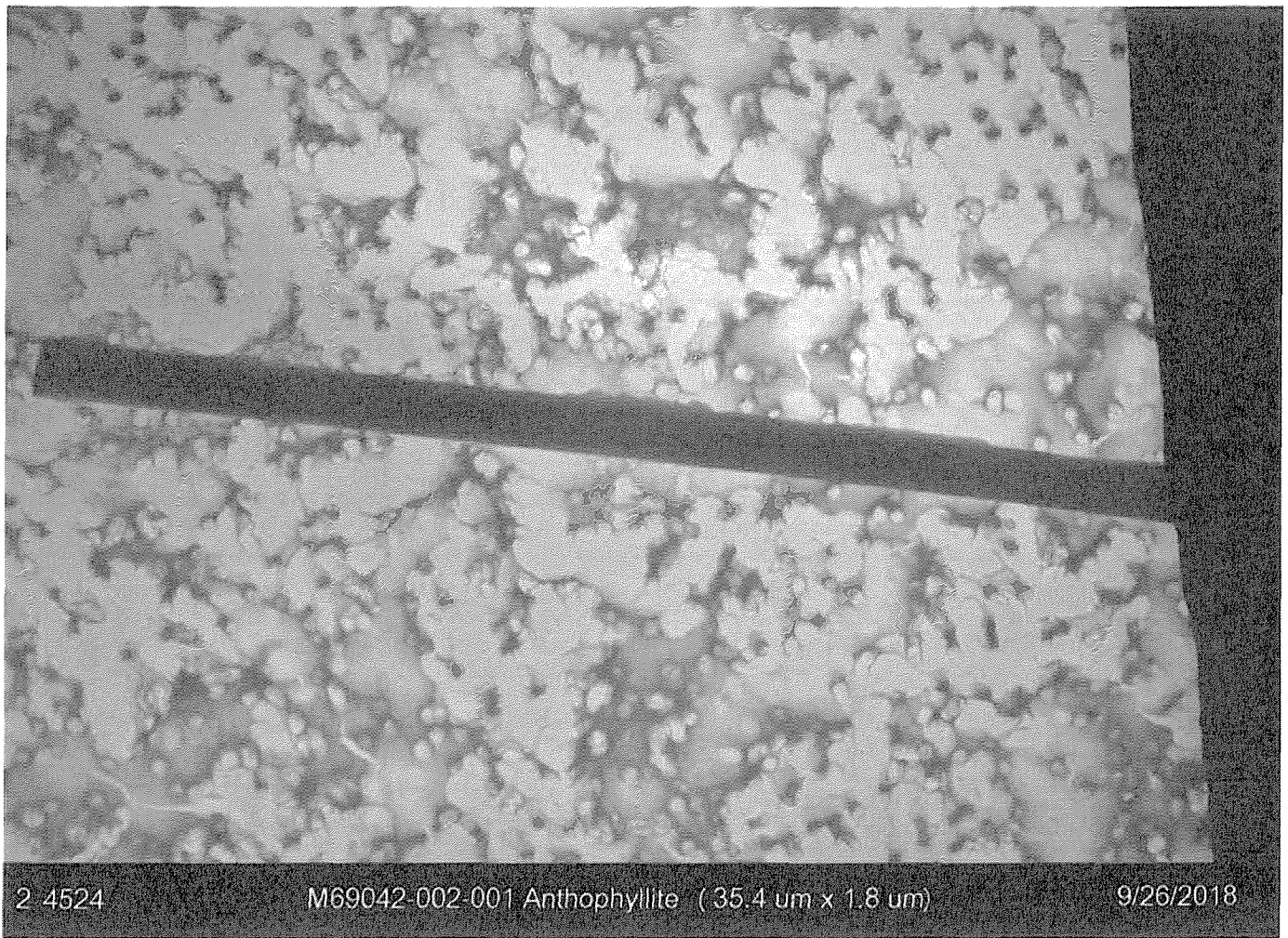
Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	14							

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02000	0.02000 g
Percent of Orig. Post Separation	100 (%)

Wt. Of Sample Analyzed	0.00010965 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	7 Str.
Structures per Gram of Sample	6.38E+04 Str./g

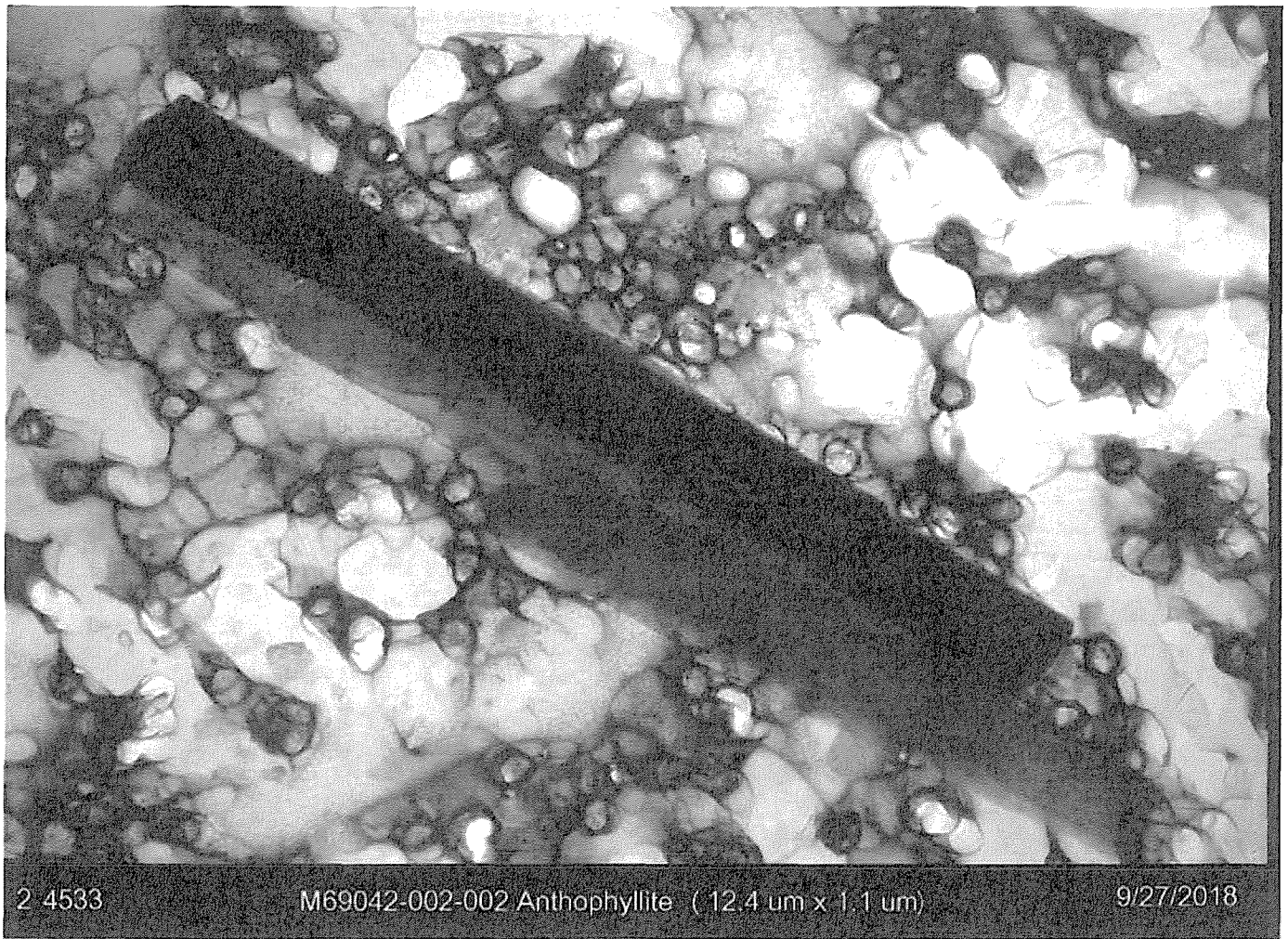
Detection Limit	9.12E+03 Str./g
Analytical Sensitivity	9.12E+03 Str./g





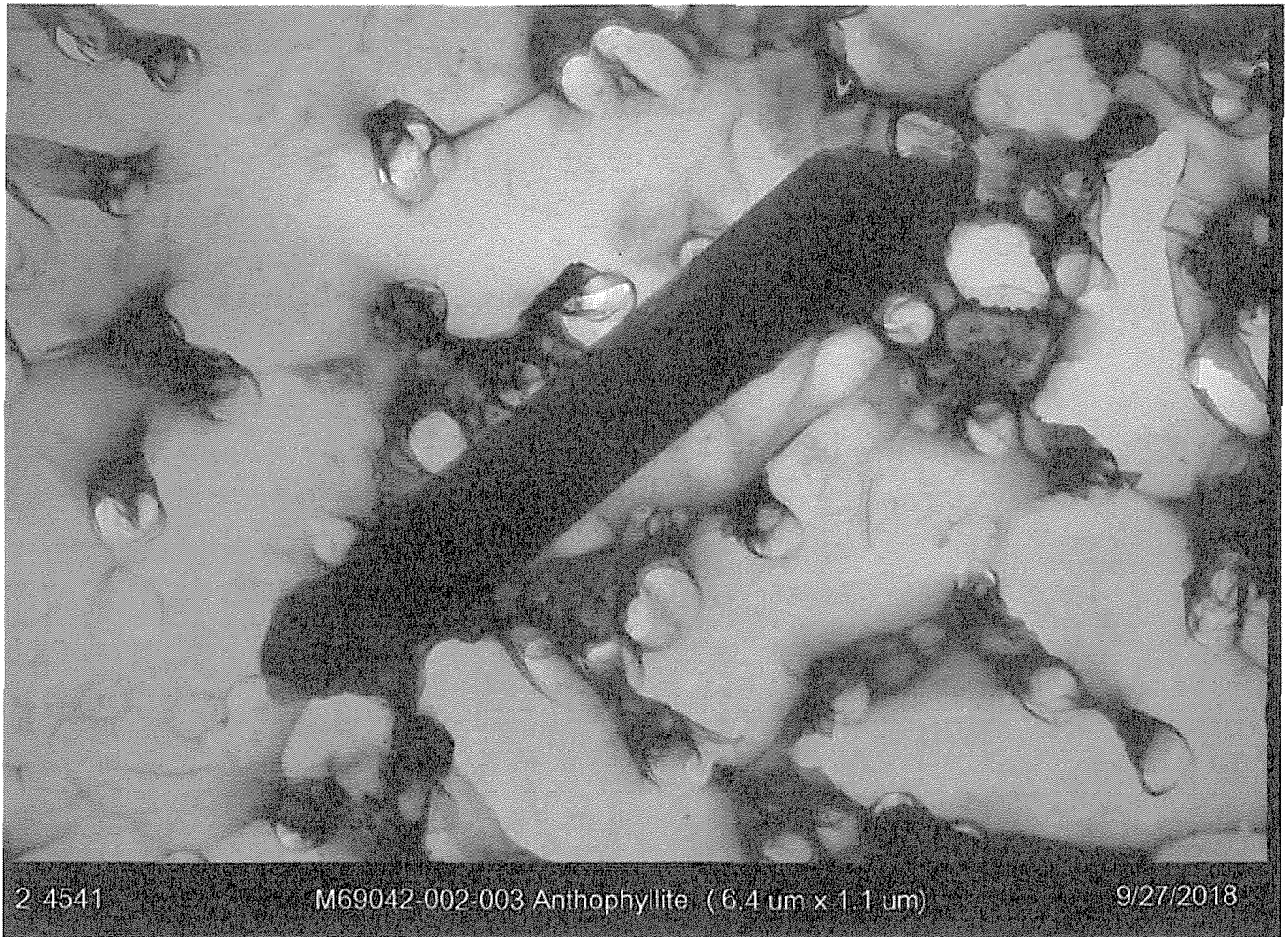
**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**





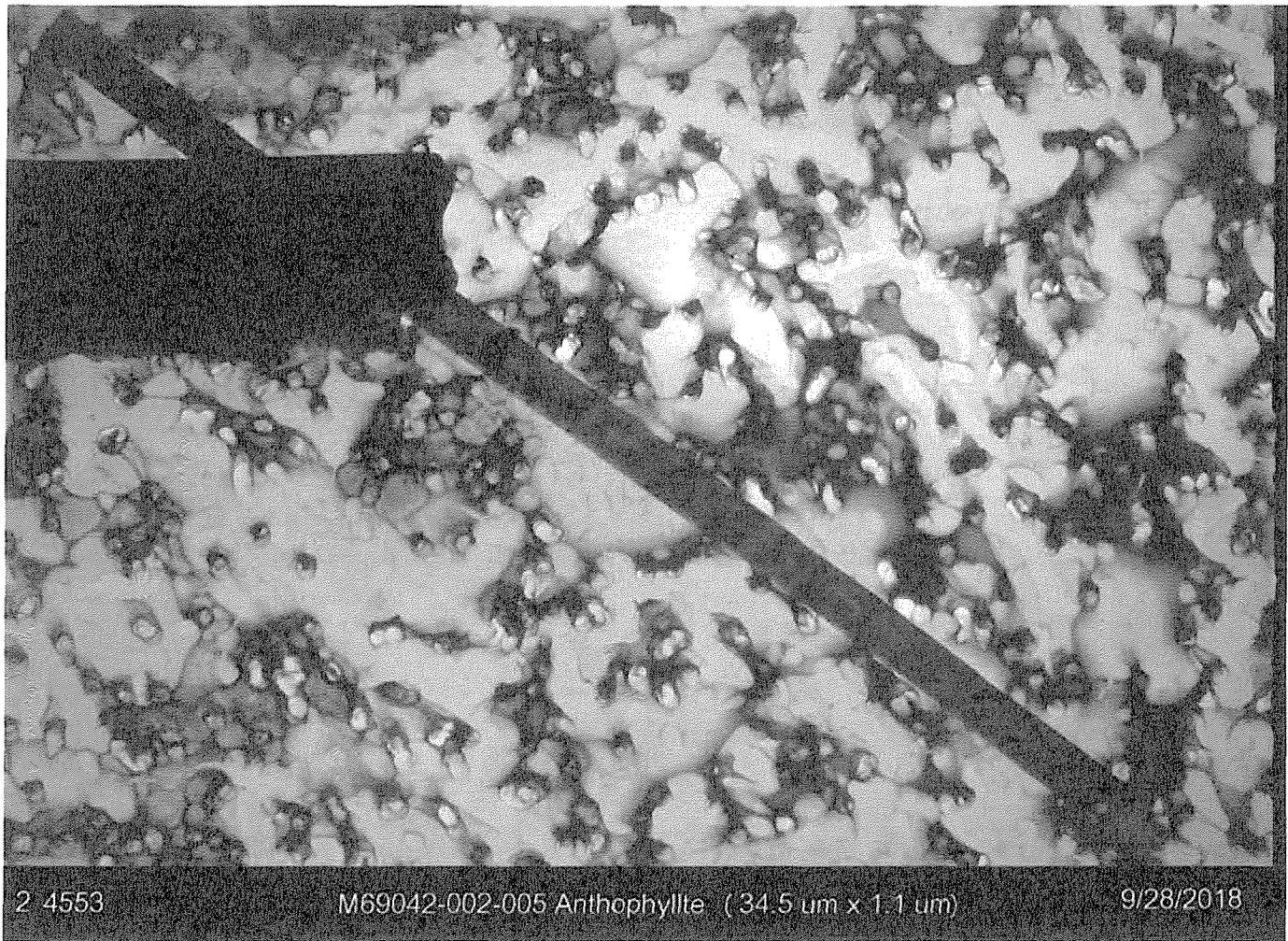
**J3 Verified Asbestos Analysis (Y/N) - YES**





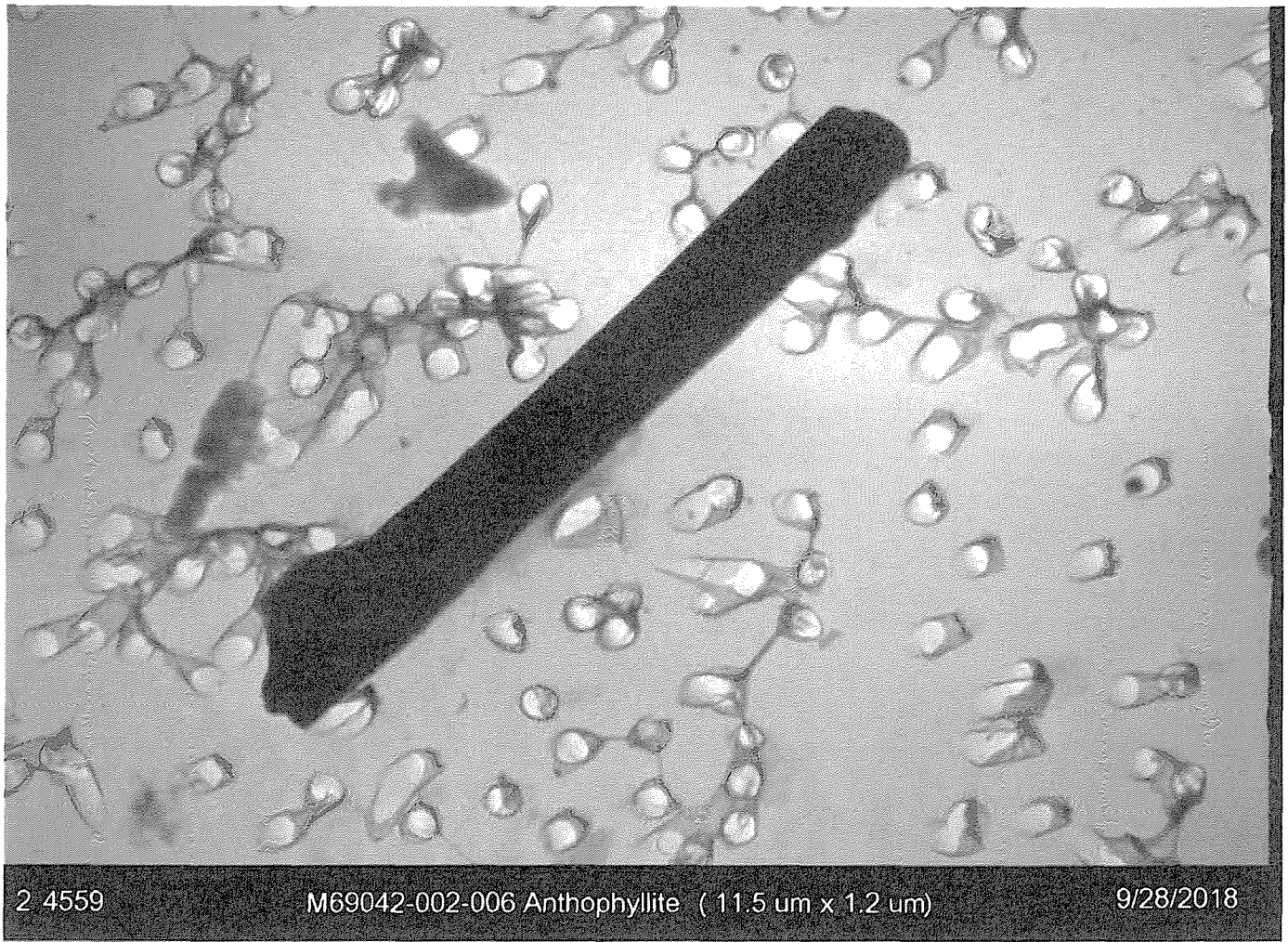
**J3 Verified Asbestos Analysis (Y/N) - YES**





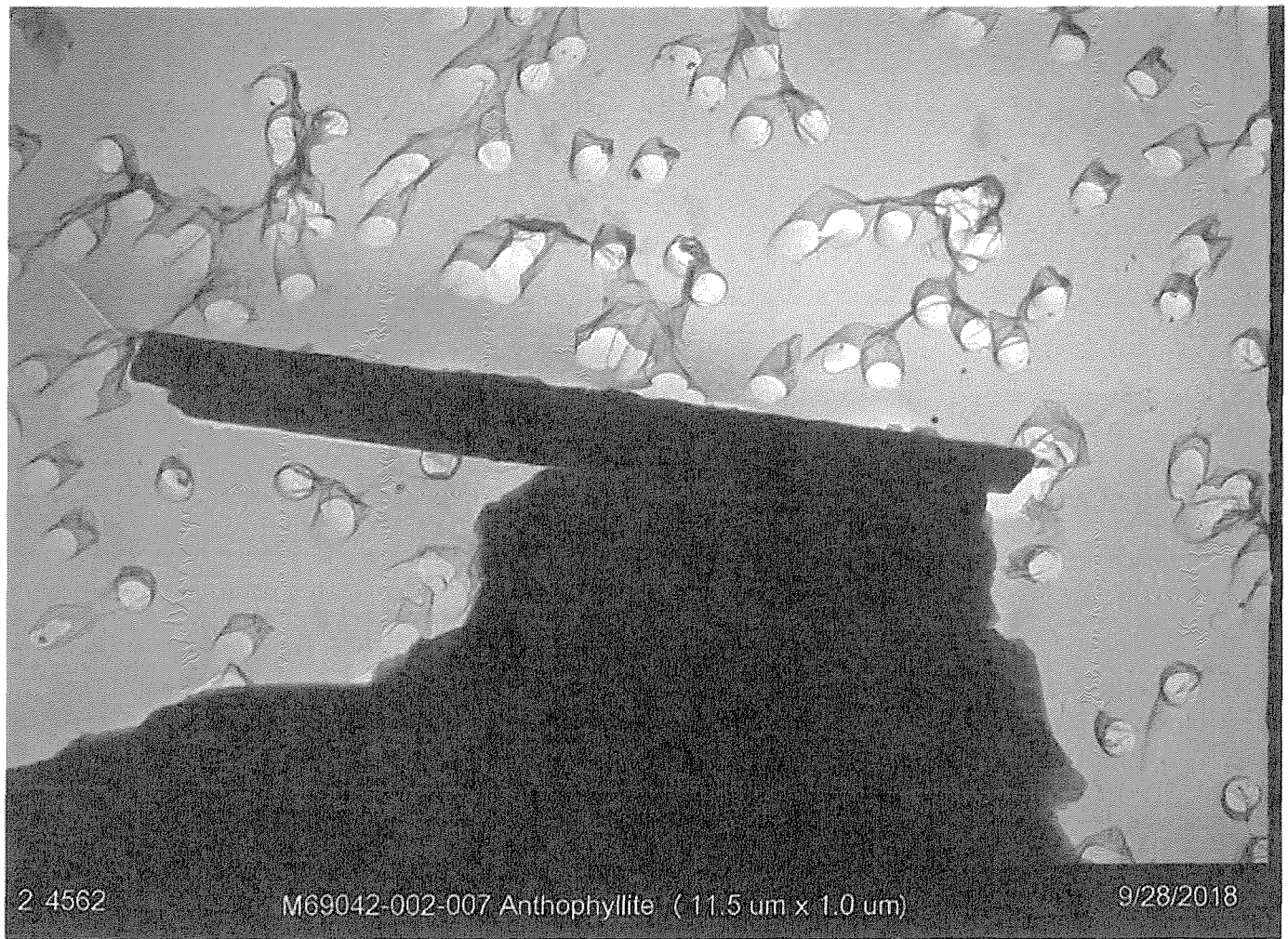
**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**

Date: 31-Oct-2018  
Analyst: CW Poye

SampleID: M69042-003  
Grid Square ID: \_\_\_\_\_

Total No. of Structures:	<u>2</u>
True Positives:	<u>1</u>
False Positives:	<u>1</u>
False Negatives:	<u>  </u>

M:\Main Company Data Store\K\SY\QA\QAQC\ITEM QC Templates\Verified Anlaysis Count Sheet 10-23-14.pdf



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-003		Grid Box #	8621	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	9/28/2018 - 10/1/2018 & 10/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02025			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	15%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A2-A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
1	A8	Bundle	Tremolite	4.52	0.44	10.3	X	X
NSD	A9							
NSD	A10							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D6							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							
NSD	F1							
NSD	F2							
NSD	F3							
NSD	F4							
NSD	F5							
NSD	F6							
NSD	F7							
NSD	F8							
NSD	F9							
NSD	F10							

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-003		Grid Box #	8621	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	9/28/2018 - 10/1/2018 & 10/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02025			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	15%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A1-B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	F1							
NSD	F2							
2	F3	Bundle	Anthophyllite	3.4	0.42	8.1	X	X
NSD	F4							
NSD	F5							
NSD	F6							
NSD	F7							
NSD	F8							
NSD	F9							
NSD	F10							
NSD	H1							
NSD	H2							
NSD	H3							
NSD	H4							
NSD	H5							
NSD	H6							
NSD	H7							
NSD	H8							
NSD	H9							
NSD	H10							
NSD	I1							
NSD	I2							
NSD	I3							
NSD	I4							
NSD	I5							
NSD	I6							
NSD	I7							
NSD	I8							
NSD	I9							
NSD	I10							
NSD	J3							

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-003		Grid Box #	8621	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	9/28/2018 - 10/1/2018 & 10/27/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02025			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	15%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
--------	--------------	-----------	------------------	--------	-------	-------	------	-----

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02025	0.02025 g
Percent of Orig. Post Separation	100 (%)
Wt. Of Sample Analyzed	0.00011102 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	2 Str.
Structures per Gram of Sample	1.80E+04 Str./g

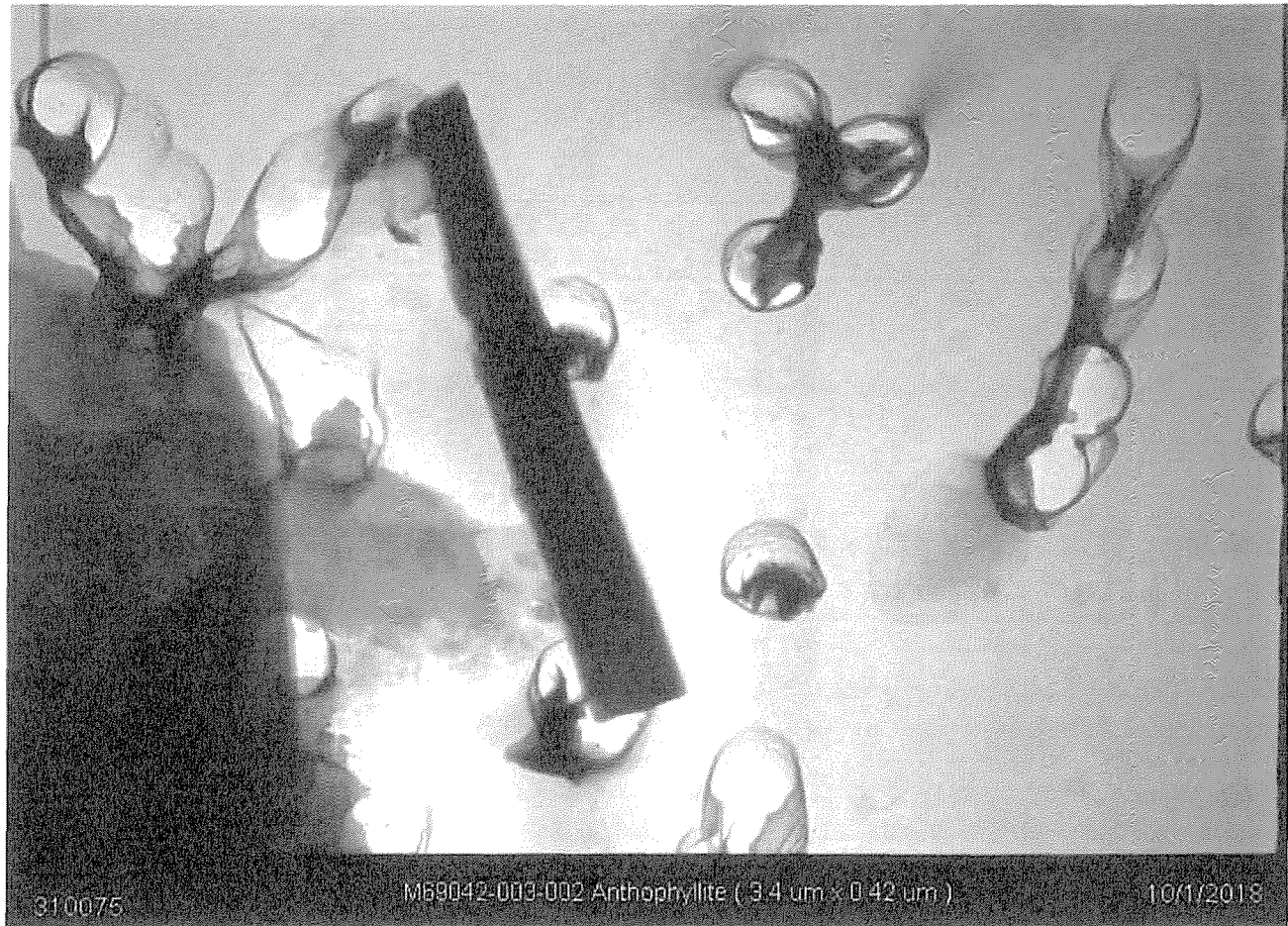
Detection Limit	9.01E+03 Str./g
Analytical Sensitivity	9.01E+03 Str./g





**J3 Verified Asbestos Analysis? - NO  
Cleavage Fragment**





**J3 Verified Asbestos Analysis (Y/N) - YES**

## Grid Square ID:

Total No. of Structures:	3
True Positives:	3
False Positives:	$\emptyset$
False Negatives:	

M:\Main Company Data Store\K\SYS\QA\QAQC\TEM QC Templates\Verified Anlaysia Count Sheet 10-23-14.pdf



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-004		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	10/15/2018 - 10/16/2018 & 10/28/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.03032			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	E6-A1							
NSD	A2							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
1	A8	Fiber	Anthophyllite	13.4	0.4	33.5	X	X
NSD	B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							
2	F1	Bundle	Anthophyllite	4.2	0.38	11.1	X	X
NSD	F2							
NSD	F3							
NSD	F4							
NSD	F5							
NSD	F6							

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-004		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	10/15/2018 - 10/16/2018 & 10/28/2018		G. O. In microns =	105	105	11025
Initial Weight(g)	0.03032			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A2-A1							
NSD	A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
NSD	A9							
NSD	A10							
NSD	B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E2							
3	E3	Bundle	Anthophyllite	13.4	0.63	21.3	X	X
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E10							
NSD	F3							
NSD	F4							

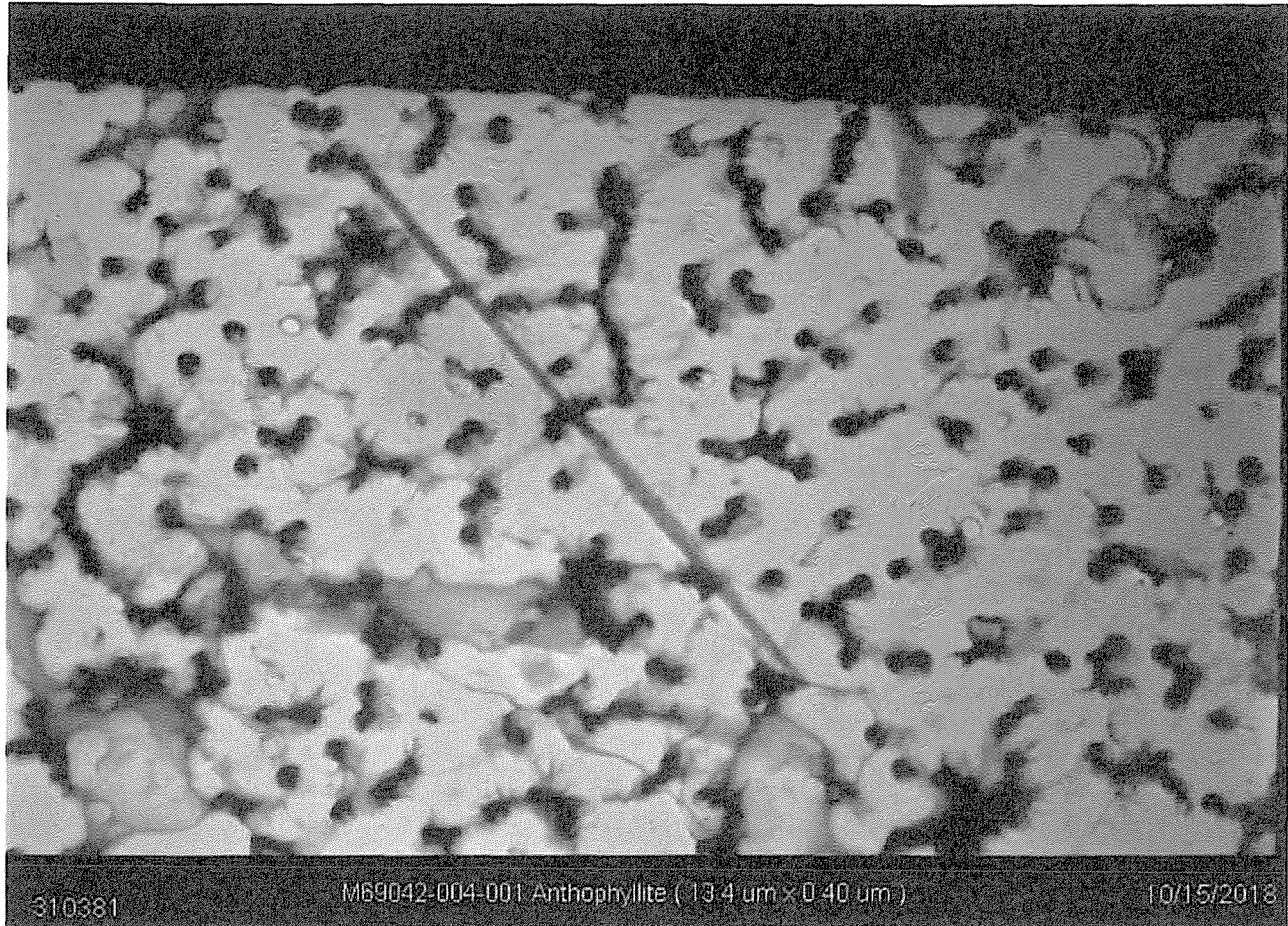
TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-004		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	10/15/2018 - 10/16/2018 & 10/28/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.03032			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
--------	--------------	-----------	------------------	--------	-------	-------	------	-----

Org. Sample Wt.	Sample Wt. Post HL Separation	
0.03032	0.03032	g
Percent of Orig. Post Separation	100	(%)
Wt. Of Sample Analyzed	0.00016622	g
Filter size	201.1	mm <sup>2</sup>
Number of Structures Counted	3	Str.
Structures per Gram of Sample	1.80E+04	Str./g

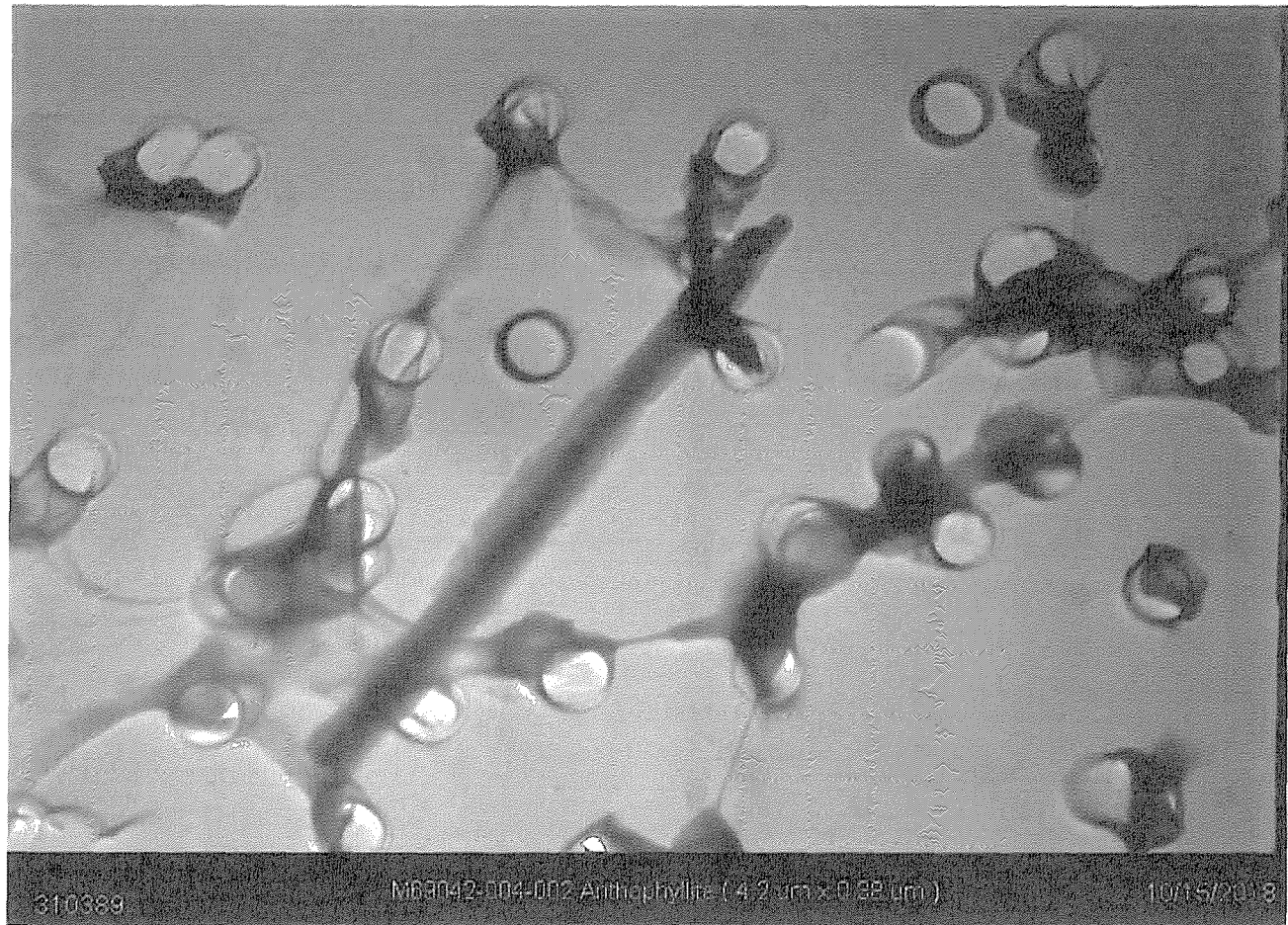
Detection Limit	6.02E+03	Str./g
Analytical Sensitivity	6.02E+03	Str./g





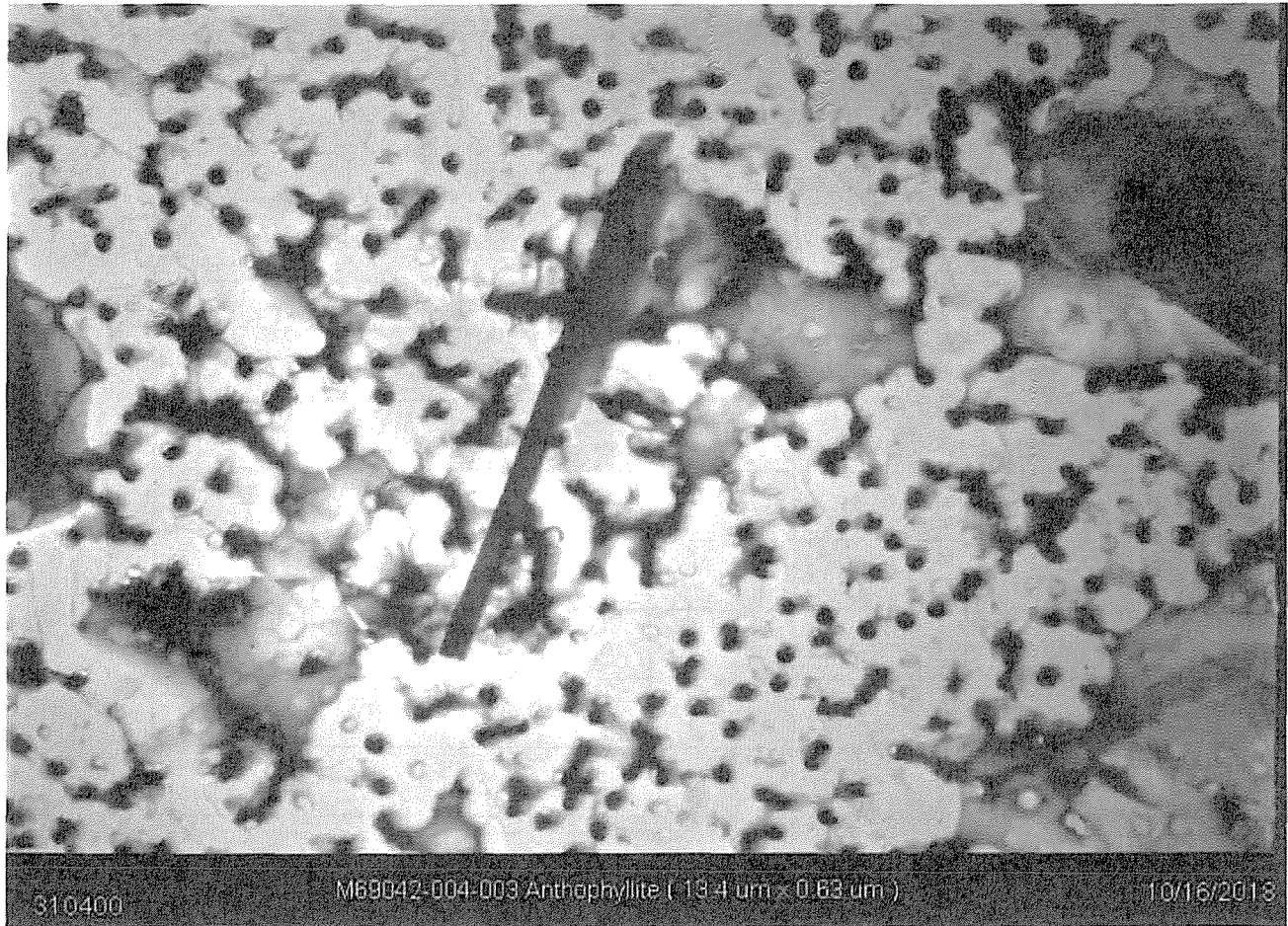
**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**



Date: 31-Oct-2018  
Analyst: LW Poye

[illegible]

PG. 1 of 1

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-008		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Anthony Keelon			Length	Width	G. O. Area
Date of Analysis	10/18/2018 - 10/19/2018 & 10/28/2018 - 10/29/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.0303			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	15%	G.O.s Counted	100
2	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	C1-A1							
NSD	A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
NSD	A9							
NSD	A10							
NSD	B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
1	C2	Bundle	Anthophyllite	3.9	0.5	7.8	X	X
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-008		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Anthony Keaton			Length	Width	G. O. Area
Date of Analysis	10/18/2018 - 10/19/2018 & 10/28/2018 - 10/29/2018		G. O. In microns =	105	105	11025
Initial Weight(g)	0.0303			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	15%	G.O.s Counted	100
2	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	C2-A1							
NSD	A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
NSD	A9							
NSD	A10							
2	B1	Bundle	Anthophyllite	7.8	1.5	5.2	X	X
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
3	C6	Bundle	Anthophyllite	5.3	0.5	10.6	X	X
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	G1							
NSD	G2							
NSD	G3							
NSD	G4							
NSD	G5							
NSD	G6							
NSD	G7							
NSD	G8							
NSD	G9							
NSD	G10							



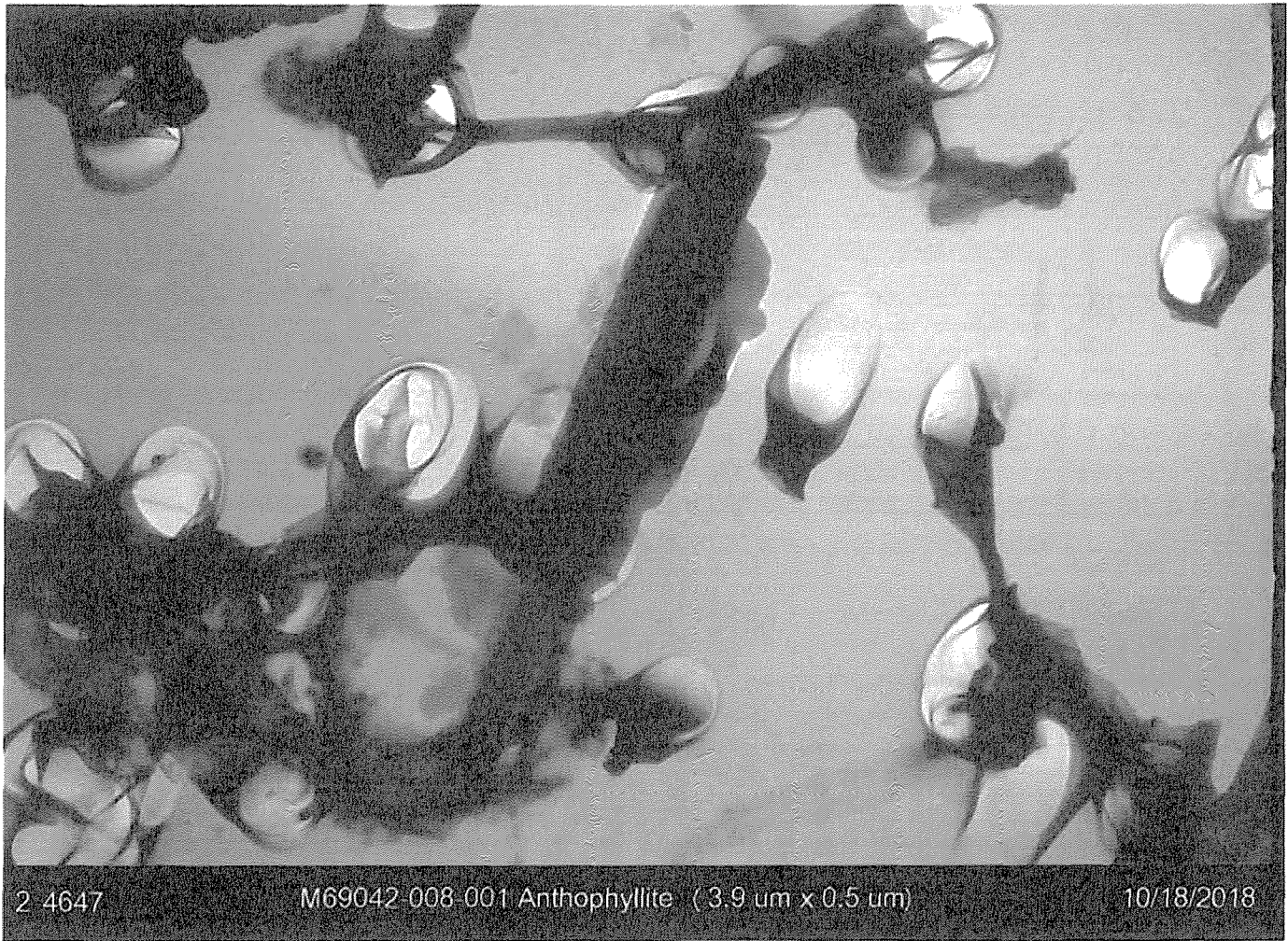
TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-008		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Anthony Keeton			Length	Width	G. O. Area
Date of Analysis	10/18/2018 - 10/19/2018 & 10/28/20118 - 10/29/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.0303			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	15%	G.O.s Counted	100
2	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
--------	--------------	-----------	------------------	--------	-------	-------	------	-----

Org. Sample Wt.		Sample Wt. Post HL Separation	
0.03030		0.03030	g
Percent of Orig. Post Separation		100	(%)
Wt. Of Sample Analyzed	0.00016612		g
Filter size	201.1		mm <sup>2</sup>
Number of Structures Counted	3		Str.
per Gram of Sample	1.81E+04		Str./g

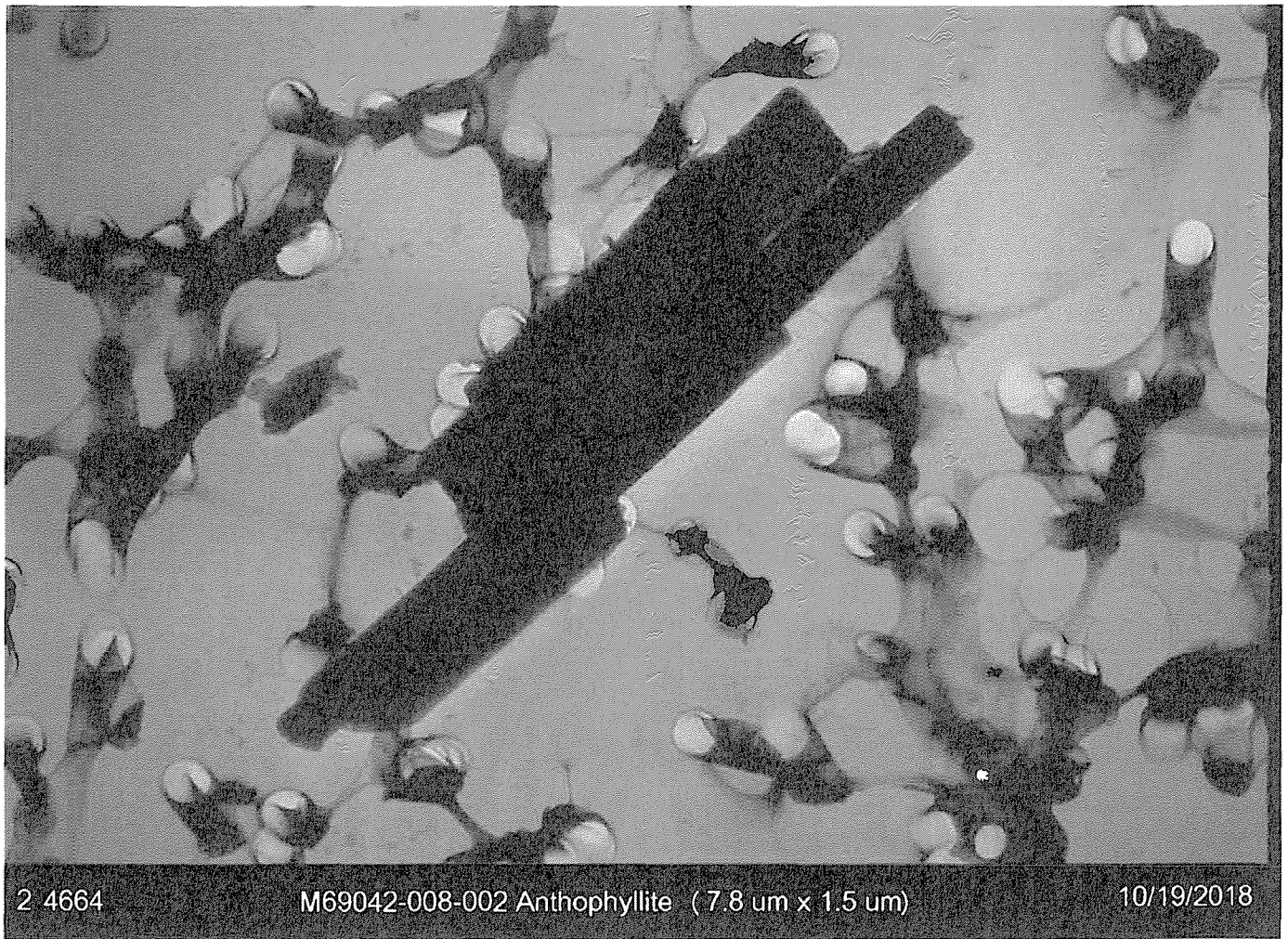
Detection Limit	6.02E+03	Str./g
Analytical Sensitivity	6.02E+03	Str./g





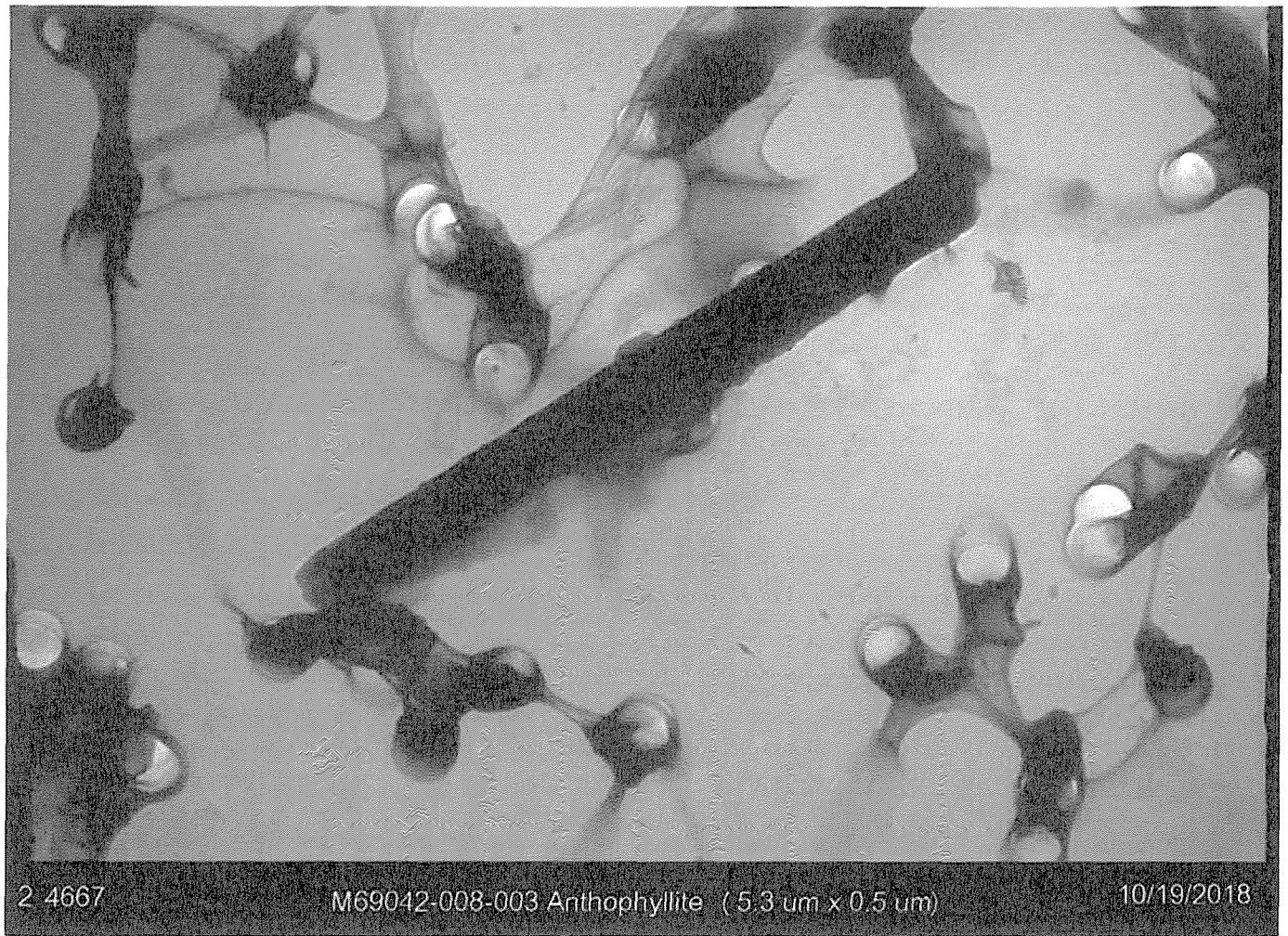
**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**

Grid Square ID:

Total No. of Structures:	<u>2</u>
True Positives:	<u>2</u>
False Positives:	<u>0</u>
False Negatives:	<u>0</u>

M:\Main Company Data Store\K\SYS\QA\QAQC\ITEM QC Templates\Verified Anlaysia Count Sheet 10-23-14.pdf



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-010		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	10/19/2018 & 10/29/2018		G. O. In microns =	105	105	11025
Initial Weight(g)	0.02922			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	E1-B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							
NSD	F3							
NSD	F4							
1	F5	Bundle	Anthophyllite	9.2	1.5	6.1	X	X
NSD	F6							
NSD	F7							
NSD	F8							
NSD	F9							
NSD	F10							
NSD	G1							
NSD	G2							
NSD	G3							
NSD	G4							
NSD	G5							
NSD	G6							
NSD	G7							
NSD	G8							
NSD	G9							
NSD	G10							



TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-010		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	10/19/2018 & 10/29/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02922			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm²			1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	E2-A1							
NSD	A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
2	A9	Bundle	Anthophyllite	8.9	0.42	21.2	X	X
NSD	A10							
NSD	B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							

TEM Bulk Talc Structure Count Sheet						
Project/ Sample No.	M69042-010		Grid Box #	8633	No. of Grids Counted	2
Analyst:	Jayme Callan			Length	Width	G. O. Area
Date of Analysis	10/19/2018 & 10/29/2018		G. O. in microns =	105	105	11025
Initial Weight(g)	0.02922			105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted	100
3	Screen Magnification	20 KX	Area Examined mm <sup>2</sup>			1.103

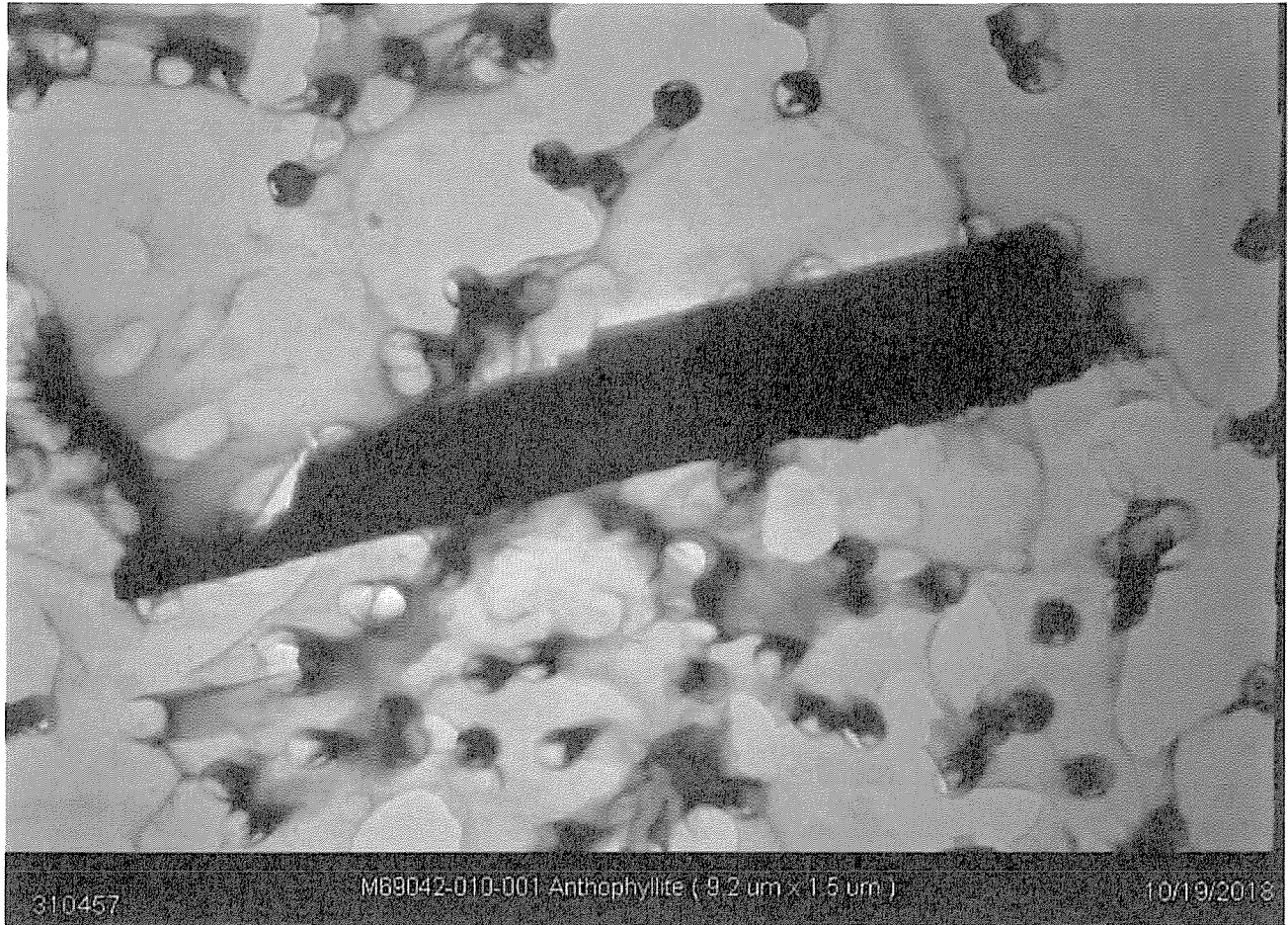
Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
--------	--------------	-----------	------------------	--------	-------	-------	------	-----

Org. Sample Wt.	Sample Wt. Post HL Separation
0.02922	0.02922 g
Percent of Orig. Post Separation	100 (%)

Wt. Of Sample Analyzed	0.00016019 g
Filter size	201.1 mm <sup>2</sup>
Number of Structures Counted	2 Str.
Structures per Gram of Sample	1.25E+04 Str./g

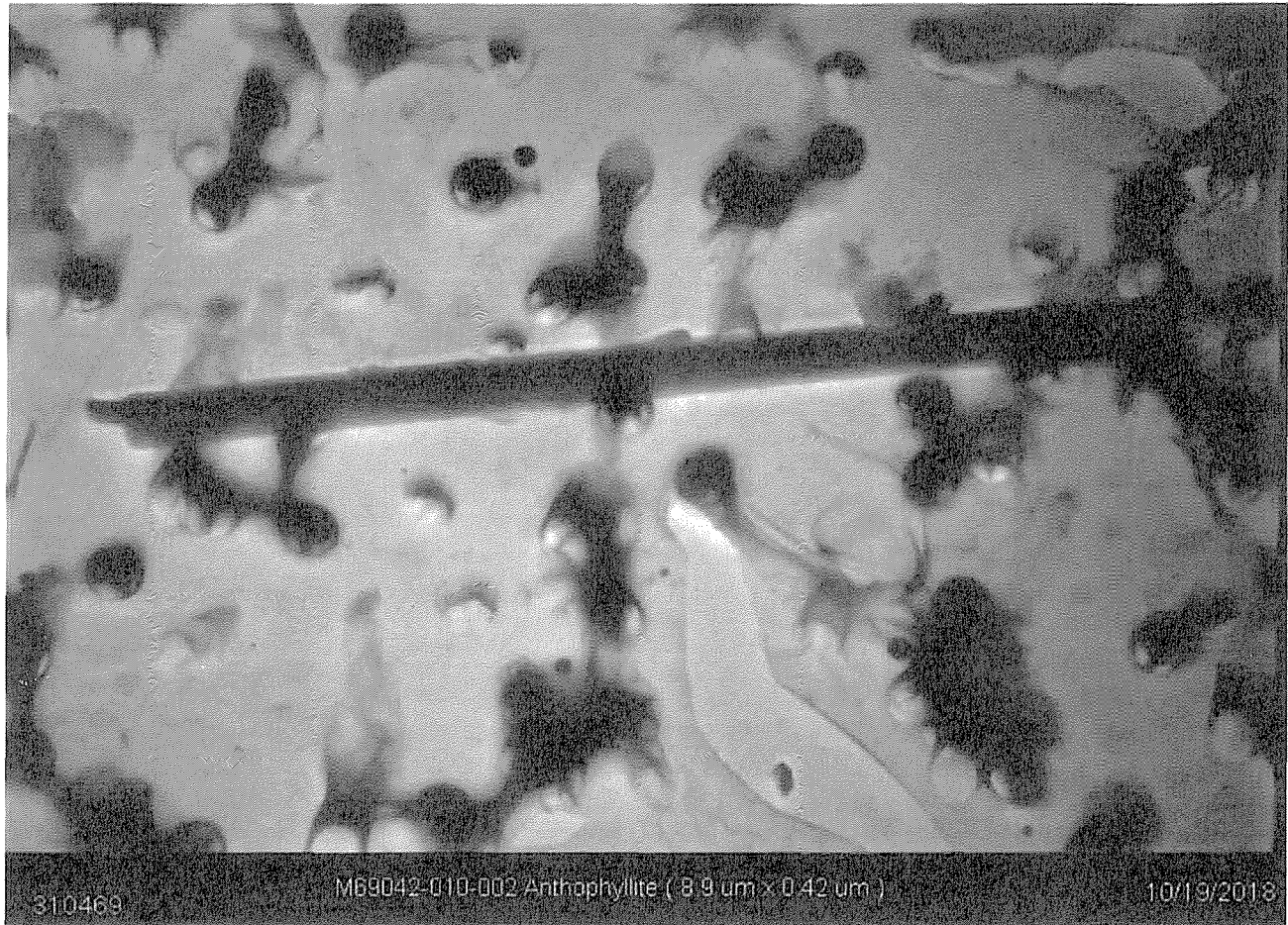
Detection Limit	6.24E+03 Str./g
Analytical Sensitivity	6.24E+03 Str./g





**J3 Verified Asbestos Analysis (Y/N) - YES**





**J3 Verified Asbestos Analysis (Y/N) - YES**